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<110> Ruben et al.
<120> 94 Human secreted proteins
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      datutyayyy tyrantytta yottoocgag tggtggacgt aagccacgaa gaccctgagg tggtggacgt aagccacgaa gaccctgagg
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aggagoagta caacagoagi taccgtytig toagqtot caccgtooti caccagact
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       agaaaccat ctccaaagc aaaggcagc cccgagaacc acaggtgtac accctgccc
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caagoctoo egtgetggac tecqaeggc ettetteet etaageaga etaacesga
caagacaga gtgcagcag gggaacgtet teteatgete etaageaga etaacegtga
                                                                                                  540
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       acaagayaay yyyyaayaay yyyaaayto toccacyoto cycyaayaa yaayaccog
acaaccacta cacgcagaag agcototoco tgtotocggg taaatgagtg cgacggccgc
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114 (0:01) 1

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<223> Synthetic sequence with 4 tandem copies of the GAS binding site
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      (1994)), 18 nucleotides complementary to the SV40 early promoter,
      and a Xho I restriction site.
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cccgaaatat ctgccatctc aattag
                                                                        86
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<221> Primer Bind
<223> Synthetic sequence complementary to the SV40 promter; includes a
      Hind III restriction site.
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<210> 5
<211> 271
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<223> Synthetic promoter for use in biological assays; includes GAS
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      1:457-468 (1994)).
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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttat
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ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt
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<211> 32
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<213> Artificial Sequence
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<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
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sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
       Xho I restriction site.
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<210> 7
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<212> DNA
<213> Artificial Sequence
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<223> Synthetic primer complementary to human genomic EGR-1 promoter
       sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Hind III restriction site.
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<212> DNA
<213> Homo sapiens
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<210> 9
<211> 73
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<220>
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<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
      (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the
      SV40 early promoter sequence, and a XhoI restriction site.
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ccatctcaat tag
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<210> 10
<211> 256
<212> DNA
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<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes NF-KB
      binding sites.
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cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga
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tggagggctc atacggggtg ctcagtagat gggcgcatca ttttatagaa tactgaggcc
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1620

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<210> 18

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 <223> n equals a,t,g, or c
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<212> DNA
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600

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                                                                                 660
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 cggtgggggc ctctggctca gatttggggc caaggaggcc tctgtcattt taaagactcg
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THE RESERVE OF THE PARTY OF THE

<213> Homo sapiens

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nttacqttac q
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<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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                                                                     960
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<212> DNA <400> 91

<213> Homo sapiens

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coggtocotg ctcttctggt ccctggtcta ctgctactgc gggctctgcg cctccatcca
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<213> Homo sapiens
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1320
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<223> n equals a,t,g, or c
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agtgtgcatt gtgctcagtc atttatttca gtgacccaaa cagagcccag tccagctgtt
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<211> 1172
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<223> n equals a,t,g, or c
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1680
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<213> Homo sapiens
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<222> (78)..(78)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
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1525

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<212> DNA
<213> Homo sapiens
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                                                                      420
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tggctctaac ggacttcagc cggctccttc gccttgccat tcttgccctt gtttctgcca agggctaca gaattaactt ataagcaaaa acagaaaggt actgtgtgtagt	atgccctaca tacaatctcc gcggctggcc tccagcagct cttgctctcc gctgtgttgt agaaattcat gtggtcggtg cggctggcag ggatggagtt	acgtgatctg tcacccgaac aaccttatcc gcagctgccg tcagagttgg ccagtacagg ttcctcacct gctgctgtat cactggccaa tactgtttgt	ceteacytyc ctttecacat ggcgcgccce tttetetty cttttgaacc agcacyagc gtagtygcca tgggacagca ggtgatgggg ggaataaaaa	actgtggtgg cgaggagccc agtgtccccc gggagggag aaagtgcct caaatgtggc cctctatatt agaaaaagat tgtgctacac	ccgtgtgcta cgcacaggtg ccactctgat cccaagggct ggaccaggtc atttgaattt gaggtgctca ttccatcacc agtgtatgtc	1440 1500 1560 1620 1680 1740 1800 1920 1980 2040 2075
<210> 133 <211> 1333 <212> DNA <213> Homo	sapiens					
<400> 133 gaatteggea egtgggetea ecacacacet atatgtttag ttttetacta atgagttgea	agtgatecte gaetgeteag gagecatttg tategttgat	cagcettaac tatgtaaatt tattteettt atgttgttta	ctcccgaata tttactatgc tgtttcccat tttgttaggg	gcctggctta ctaaggttga attgttttgt atatgaaccc	taggtgcacg ccacctttta tcctatccat tttgacagta	60 120 180 240 300 360

420

540

660

720

780

840

900

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catgagtttt aaaaaatttt tatgtagtct gaataccagt ttttttagtg gtttctggat
tttgagtcat aattagaatg twtttctcaa tccagagcaa tagagtaatt cacctaaatt
ctacatctaa attttgaacc tctgaagcat attctggcat aagatataag ttatggatct
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cottattttt cocatatgrg ctttaaaaaa ttottaacat atagagcata ctaaaactgt
ccaactcaag ttctctccca agggttgcac ttttaaccac ttattttgtc actgttcttt
tgatactttm cctgataaag atacactttt tactactttt aaattattac agtgttctat
                                                                  1020
ttggcagtgc ccaaacaggt gatggcagat agaggcagga tgcaatgcct gtgtggaaag
                                                                  1080
aatgtcatct cagtgcttct attttaagat agtctctagg aatgatttaa ggactgttct
                                                                  1140
catgtaaaat ccctatttct ttttttattc cattacgaat tatttgccca aaagttggat
                                                                  1200
atctgtcaaa gattcataag acaagaggga gagaccctta aataagtact aaacttgtaa
                                                                  1260
1320
aaaaaaaact cga
                                                                  1333
<210> 134
<211> 56
<212> PRT
<213> Homo sapiens
<400> 134
Met Ala Lys Thr Asp Phe Ser Ile Ile Leu Leu Lys Leu His Cys Leu
Phe Phe Phe Ser Val Ile Ser Val His Cys Ala Gln Ser Phe Ile Ser
Val Thr Gln Thr Glu Pro Ser Pro Ala Val Cys Ile Phe Pro Ala Val
Gly Ser Gly Leu Gly Pro Cys Asp
<210> 135
<211> 41
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 135
Met Ala Xaa Leu Asp Asn Cys Leu Met Leu Ile Thr Ser Gly Thr
Trp Leu Gly Ser Val Ala Arg Lys Thr Trp Gln Ala Ile Cys Asp Ser
Gly Ser Ser Gly Cys Ala Leu Ile Arg
```

<210> 136 <211> 414 <212> PRT

<213> Homo sapiens

<400> 136

Met Asn Pro Thr Leu Gly Leu Ala Ile Phe Leu Ala Val Leu Leu Thr Val Lys Gly Leu Leu Lys Pro Ser Phe Ser Pro Arg Asn Tyr Lys Ala Leu Ser Glu Val Gln Gly Trp Lys Gln Arg Met Ala Ala Lys Glu Leu Ala Arg Gln Asn Met Asp Leu Gly Phe Lys Leu Leu Lys Lys Leu Ala Phe Tyr Asn Pro Gly Arg Asn Ile Phe Leu Ser Pro Leu Ser Ile Ser Thr Ala Phe Ser Met Leu Cys Leu Gly Ala Gln Asp Ser Thr Leu Asp Glu Ile Lys Gln Gly Phe Asn Phe Arg Lys Met Pro Glu Lys Asp Leu His Glu Gly Phe His Tyr Ile Ile His Glu Leu Thr Gln Lys Thr Gln Asp Leu Lys Leu Ser Ile Gly Asn Thr Leu Phe Ile Asp Gln Arg Leu 130 135 140 Gln Pro Gln Arg Lys Phe Leu Glu Asp Ala Lys Asn Phe Tyr Ser Ala Glu Thr Ile Leu Thr Asn Phe Gln Asn Leu Glu Met Ala Gln Lys Gln 165 170 175 Ile Asn Asp Phe Ile Ser Gln Lys Thr His Gly Lys Ile Asn Asn Leu Ile Glu Asn Ile Asp Pro Gly Thr Val Met Leu Leu Ala Asn Tyr Ile Phe Phe Arg Ala Arg Trp Lys His Glu Phe Asp Pro Asn Val Thr Lys 210 215 220 Glu Glu Asp Phe Phe Leu Glu Lys Asn Ser Ser Val Lys Val Pro Met 225 230 235 240 Met Phe Arg Ser Gly Ile Tyr Gln Val Gly Tyr Asp Asp Lys Leu Ser 245 250 255 Cys Thr Ile Leu Glu Ile Pro Tyr Gln Lys Asn Ile Thr Ala Ile Phe Ile Leu Pro Asp Glu Gly Lys Leu Lys His Leu Glu Lys Gly Leu Gln 275 280 285 Val Asp Thr Phe Ser Arg Trp Lys Thr Leu Leu Ser Arg Arg Val Val 290 295 300 Asp Val Ser Val Pro Arg Leu His Met Thr Gly Thr Phe Asp Leu Lys Lys Thr Leu Ser Tyr Ile Gly Val Ser Lys Ile Phe Glu Glu His Gly 325 330 335Asp Leu Thr Lys Ile Ala Pro His Arg Ser Leu Lys Val Gly Glu Ala 340 345 350 Val His Lys Ala Glu Leu Lys Met Asp Glu Arg Gly Thr Glu Gly Ala \$355\$

Ala Gly Thr Gly Ala Gln Thr Leu Pro Met Glu Thr Pro Leu Val Val 370 \$375\$

Ser Val Leu Phe Leu Gly Lys Ile Val Asn Pro Ile Gly Lys

<210> 137

<211> 44 <212> PRT

<213> Homo sapiens

<400> 137

Met Gly Gln Gln Ser Cys Trp Met Gly Leu Gly Cys Trp Leu Ser Leu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ser Gly Leu Ser Gly Val Val Arg Ala Ser Pro Arg Ser Pro Arg Pro 25 30

Arg Arg Gly Ala Ala Cys Gly Glu Thr Leu Met Pro 35

<210> 138

<211> 197 <212> PRT

<213> Homo sapiens

<400> 138

Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala Ala 1 10 15

Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile Leu Gly

Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His Asn

Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser Ala Met Arg Glu 50 60

Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser Leu Val Asn Thr Val 65 70 80

Leu Lys His Ile Ile Trp Leu Lys Val Ile Thr Ala Asn Ile Leu Gln $85 \\ 90 \\ 95$

Leu Gln Val Lys Pro Ser Ala Asn Asp Gln Glu Leu Leu Val Lys Ile 100 105 110

Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr 145 150 155 160

```
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu
Val Asn Ala Leu Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Met
            180
Pro Arg Trp Pro Asn
       195
<210> 139
<211> 45
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 139
Met His Arg Gln Leu Leu Gly Phe Cys Phe Xaa Phe Cys Phe Phe Phe
Lys Arg His Cys Asp Cys Ile Leu Leu Tyr Leu Ile Gly Phe Val Phe
Leu Leu Thr Met Val Lys Ile His Leu Ser Glu His Ser
<210> 140
<211> 40
<212> PRT
<213> Homo sapiens
<400> 140
Met Leu Lys Arg Val Ile Leu Leu Val Glu Met Phe Ile His Phe Leu
Ile Tyr Ala Lys Ser Phe Tyr His Lys Ser Trp Glu Gln Leu Ser Phe
Thr His Tyr Leu Leu Gln Ile Ser
<210> 141
<211> 84
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 141
Met Pro Ile Leu Val Phe Ser Ile Cys Leu Gln Cys Thr Leu Phe Arg
```

Ser Glu Ala Ile Ile Phe Gln Glu Glu Arg Asn His Gln Val Thr Leu

20 25 30

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<210> 142
<211> 200
<212> PRT
<213> Homo sapiens

<220>
<221> STTE

<222> (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<221> STTE

<222> (149)

<221> STTE

<222> (149)

<223 Xaa equals any of the naturally occurring L-amino acids</pre>
<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (173)

<221> SITE <222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (189)

<223> Xaa equals any of the naturally occurring L-amino acids

Phe Ser Ala Arg Gly Ala Arg Asp Arg Phe Leu Asn Lys Ser Gly Pro

Gln Pro Gly Lys Lys Met Lys Thr Thr His Cys Lys Gln Pro Leu Phe 35 40 45

Gln Glu Glu Arg Glu Ala Val Gly Met Trp Gly Gly Arg Gly His Ser $65 \ \ \, 70 \ \ \,$ 80

Tyr Pro Glu Tyr Ile Lys Thr Ser Glu Val Thr Glu Val Arg Asp Ser 85 90 95

Pro Lys His Pro Gln Val Gln Pro Phe Leu Thr Thr Arg Val Thr Cys 100 105 110

Arg Val Pro Gly His Leu Gln Val Leu Glu Ala Leu Cys Gly Ala Trp 115 120 125

Gly Ser Met Phe Lys His Ala Leu Val Val Val Gln Val Pro Arg Xaa 130 135 140

Arg Gly Arg Ala Xaa Leu Gly Ser Glu Trp Gln Val Gly Gln Leu Xaa 145 150 160

Leu Ile Leu Leu His Gly Thr Gln His Trp Ala Ala Xaa Leu Val Pro 165 170 175

Xaa Leu Pro Gl
n Glu Ser Ile Leu Pro Ala Gl
n Ser Xaa Arg Val Thr $180 \hspace{1.5cm} 185 \hspace{1.5cm} 190 \hspace{1.5cm}$

Asn Thr Pro Gly Thr Glu Glu Thr 195 200

<210> 143

<211> 325 <212> PRT

<213> Homo sapiens

<400> 143

Met Gly Ser Gln Val Ser Ser Met Leu Lys Leu Ala Leu Gln Asn Cys $1 ext{1}$ 15

Cys Pro Gln Leu Trp Gln Arg His Ser Ala Arg Asp Arg Gln Cys Ala 20 30 Arg Val Leu Ala Asp Glu Arg Ser Pro Gln Pro Gly Ala Ser Pro Gly Ala Ser

35 40 45

Glu Asp Ile Ala Asn Phe Gln Val Leu Val Lys Ile Leu Pro Val Met 50 60

Val Thr Leu Val Pro Tyr Trp Met Val Tyr Phe Gln Met Gln Ser Thr 65 70 70 75 Met Val Leu Gln Gly Leu His Leu His Ile Pro Asn Ile Phe Pro Ala

85 90 95

Asn Pro Ala Asn Ile Ser Val Ala Leu Arg Ala Gln Gly Ser Ser Tyr 100 105

Thr Ile Pro Glu Ala Trp Leu Leu Leu Ala Asn Val Val Val Leu 115 120 125

Ile Leu Val Pro Leu Lys Asp Arg Leu Ile Asp Pro Leu Leu Leu Arg 130 135 140

Cys Lys Leu Leu Pro Ser Ala Leu Gl
n Lys Met Ala Leu Gly Met Phe 145 150155155

Phe Gly Phe Thr Ser Val Ile Val Ala Gly Val Leu Glu Met Glu Arg 165 170 175

Leu His Tyr Ile His His Asn Glu Thr Val Ser Gln Gln Ile Gly Glu Val Leu Tyr Asn Ala Ala Pro Leu Ser Ile Trp Trp Gln Ile Pro Gln Tyr Leu Leu Ile Gly Ile Ser Glu Ile Phe Ala Ser Ile Pro Gly Leu Glu Phe Ala Tyr Ser Glu Ala Pro Arg Ser Met Gln Gly Ala Ile Met Gly Ile Phe Phe Cys Leu Ser Gly Val Gly Ser Leu Leu Gly Ser Ser Leu Val Ala Leu Leu Ser Leu Pro Gly Gly Trp Leu His Cys Pro Lys 260 265 270 Asp Phe Gly Asn Ile Asn Asn Cys Arg Met Asp Leu Tyr Phe Phe Leu Leu Ala Gly Ile Gln Ala Val Thr Ala Leu Leu Phe Val Trp Ile Ala Gly Arg Tyr Glu Arg Ala Ser Gln Gly Pro Ala Ser His Ser Arg Phe Ser Arg Asp Arg Gly

<210> 144 <211> 118

<212> PRT

<213> Homo sapiens <220>

<221> SITE <222> (107)

<223> Xaa equals any of the naturally occurring L-amino acids

Met Val Phe Val His Leu Tyr Leu Gly Asn Val Leu Ala Leu Leu Leu

Phe Val His Tyr Ser Asn Gly Asp Glu Ser Ser Asp Pro Gly Pro Gln

His Arg Ala Gln Gly Pro Gly Pro Glu Pro Thr Leu Gly Pro Leu Thr Arg Leu Glu Gly Ile Lys Val Gly His Glu Arg Lys Val Gln Leu Val

Thr Asp Arg Asp His Phe Ile Arg Thr Leu Ser Leu Lys Pro Leu Leu 65 70 75 80

Phe Glu Ile Pro Gly Phe Leu Thr Asp Glu Glu Cys Arg Leu Ile Ile His Leu Ala Gln Met Lys Gly Leu Gln Arg Xaa Arg Ser Cys Leu Leu

105

Lys Ser Met Lys Arg Gln

115

```
<210> 145
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 145
Met Lys Leu Thr Ile Phe Phe Xaa Phe Pro Gln Thr Ile Thr Gly Leu
Leu Gln Xaa Leu Met Ser Arg Gln Val Glu Asp Val Ala Phe Leu Pro
Leu Pro His Pro Val Phe Ser Phe Ser Phe Phe Phe Pro Leu Val
                             40
<210> 146
<211> 519
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (207)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (213)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 146
Met Gln Gly Gly Gln Arg Pro His Leu Leu Leu Leu Leu Leu Ala Val
Cys Leu Gly Ala Gln Ser Arg Asn Gln Glu Glu Arg Leu Leu Ala Asp
Leu Met Arg Asn Tyr Asp Pro His Leu Arg Pro Ala Glu Arg Asp Ser
Asp Val Val Asn Val Ser Leu Lys Leu Thr Leu Thr Asn Leu Ile Ser
```

5.0 55 60 Leu Asn Glu Arg Glu Glu Ala Leu Thr Thr Asn Val Trp Ile Glu Met Gln Trp Cys Asp Tyr Arg Leu Arg Trp Asp Pro Lys Asp Tyr Glu Gly 85 90 95 Leu Trp Ile Leu Arg Val Pro Ser Thr Met Val Trp Arg Pro Asp Ile 100 105 110 Val Leu Glu Asn Asn Val Asp Gly Val Phe Glu Val Ala Leu Tyr Cys Asn Val Leu Val Ser Pro Asp Gly Cys Ile Tyr Trp Leu Pro Pro Ala 130 135 140 Ile Phe Arg Ser Ser Cys Ser Ile Ser Val Thr Tyr Phe Pro Phe Asp 145 150 155 160 Trp Gln Asn Cys Ser Leu Ile Phe Gln Ser Gln Thr Tyr Ser Thr Ser Glu Ile Asn Leu Gln Leu Ser Gln Glu Asp Gly Gln Ala Ile Glu Trp Ile Phe Ile Asp Pro Glu Ala Phe Thr Glu Asn Gly Xaa Trp Xaa Ile 195 200 Arg His Arg Pro Xaa Lys Met Leu Leu Asp Ser Val Ala Pro Ala Glu 210 215 220 Xaa Ala Gly His Gln Lys Val Val Phe Tyr Leu Leu Ile Gln Arg Lys 225 230 235 240 Pro Leu Phe Tyr Val Ile Asn Ile Ile Ala Pro Cys Val Leu Ile Ser 245 250 255 Ser Val Ala Ile Leu Ile Tyr Phe Leu Pro Ala Lys Ala Gly Gly Gln 260 265 270 Lys Cys Thr Val Ala Thr Asn Val Leu Leu Ala Gln Thr Val Phe Leu 275 280 285 Phe Leu Val Ala Lys Lys Val Pro Glu Thr Ser Gln Ala Val Pro Leu Ile Ser Lys Tyr Leu Thr Phe Leu Met Val Val Thr Ile Leu Ile Val Val Asn Ser Val Val Val Leu Asn Val Ser Leu Arg Ser Pro His Thr 330 His Ser Met Ala Arg Gly Val Arg Lys Val Phe Leu Arg Leu Leu Pro 340 345Gln Leu Leu Arg Met His Val Arg Pro Leu Ala Pro Ala Ala Val Gln 355 360 365 Asp Ala Arg Phe Arg Leu Gln Asn Gly Ser Ser Ser Gly Trp Pro Ile 370 375 380 Met Ala Arg Glu Glu Gly Asp Leu Cys Leu Pro Arg Ser Glu Leu Leu

Phe Arg Gln Arg Gln Arg Asn Gly Leu Val Gln Ala Val Leu Glu Lys

405 410 415

Leu Glu Asn Gly Pro Glu Val Arg Gln Ser Gln Glu Phe Cys Gly Ser 420 425 430

Leu Lys Gln Ala Ser Pro Ala Ile Gln Ala Cys Val Asp Ala Cys Asn 435 440

Leu Met Ala Arg Ala Arg Arg Gln Gln Ser His Phe Asp Ser Gly Asn $450 \hspace{1.5cm} 455 \hspace{1.5cm} 460 \hspace{1.5cm}$

Glu Glu Trp Leu Leu Val Gly Arg Val Leu Asp Arg Val Cys Phe Leu 465 470470475

Ala Met Leu Ser Leu Phe Ile Cys Gly Thr Ala Gly Ile Phe Leu Met $485 \hspace{1.5cm} 490 \hspace{1.5cm} 495 \hspace{1.5cm}$

Ala His Tyr Asn Gln Val Pro Asp Leu Pro Phe Pro Gly Asp Pro Arg 500 505 510

Pro Tyr Leu Pro Leu Pro Asp

<210> 147

<211> 47 <212> PRT

<213> Homo sapiens

<400> 147

Met Leu Leu Phe Ser Ser Arg Phe Ile Met Phe Leu Trp Pro Pro Val 1 10 15

Cys His Phe Ile Tyr Val Leu Ile Leu Cys Asn Ser Ile Ala Leu 35 45

<210> 148

<211> 431

<212> PRT

<213> Homo sapiens

 $^{<400>}$ 148 Met Ser Trp Val Gln Ala Thr Leu Leu Ala Arg Gly Leu Cys Arg Ala 1 1 1

Trp Gly Gly Thr Cys Gly Ala Ala Leu Thr Gly Thr Ser Ile Ser Gln 20 25

Val Pro Arg Arg Leu Pro Arg Gly Leu His Cys Ser Ala Ala Ala His $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Gly Glu Arg Asp Lys Ala Ser Phe Leu Gln Thr Val Gln Lys Phe $85 \hspace{1cm} 90 \hspace{1cm} 95$

Ala Glu His Ser Val Arg Lys Arg Gly His Ile Asp Phe Ile Tyr Leu Ala Leu Arg Lys Met Arg Glu Tyr Gly Val Glu Arg Asp Leu Ala Val Tyr Asn Gln Leu Leu Asn Ile Phe Pro Lys Glu Val Phe Arg Pro Arg Asn Ile Ile Gln Arg Ile Phe Val His Tyr Pro Arg Gln Gln Glu Cys Gly Ile Ala Val Leu Glu Gln Met Glu Asn His Gly Val Met Pro Asn Lys Glu Thr Glu Phe Leu Leu Ile Gln Ile Phe Gly Arg Lys Ser Tyr Pro Met Leu Lys Leu Val Arg Leu Lys Leu Trp Phe Pro Arg Phe Met Asn Val Asn Pro Phe Pro Val Pro Arg Asp Leu Pro Gln Asp Pro Val Glu Leu Ala Met Phe Gly Leu Arg His Met Glu Pro Asp Leu Ser Ala 225 Arg Val Thr Ile Tyr Gln Val Pro Leu Pro Lys Asp Ser Thr Gly Ala Ala Asp Pro Pro Gln Pro His Ile Val Gly Ile Gln Ser Pro Asp Gln Gln Ala Ala Leu Ala Arg His Asn Pro Ala Arg Pro Val Phe Val Glu Gly Pro Phe Ser Leu Trp Leu Arg Asn Lys Cys Val Tyr Tyr His Ile Leu Arg Ala Asp Leu Leu Pro Pro Glu Glu Arg Glu Val Glu Glu Thr 305 310 315 320 Pro Glu Glu Trp Asn Leu Tyr Tyr Pro Met Gln Leu Asp Leu Glu Tyr Val Arg Ser Gly Trp Asp Asn Tyr Glu Phe Asp Ile Asn Glu Val Glu Glu Gly Pro Val Phe Ala Met Cys Met Ala Gly Ala His Asp Gln Ala Thr Met Ala Lys Trp Ile Gln Gly Leu Gln Glu Thr Asn Pro Thr Leu Ala Gln Ile Pro Val Val Phe Arg Leu Ala Gly Ser Thr Arg Glu Leu 390 Gln Thr Ser Ser Ala Gly Leu Glu Glu Pro Pro Leu Pro Glu Asp His Gln Glu Glu Asp Asp Asn Leu Gln Arg Gln Gln Gln Gly Gln Ser

<211> 442 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (364) <223> Xaa equals any of the naturally occurring L-amino acids <400> 149 Met Trp Phe Thr Tyr Leu Leu Leu Tyr Leu His Ser Val Arg Ala Tyr Ser Ser Arg Gly Ala Gly Cys Cys Cys Cys Trp Ala Arg Trp Arg Arg 20 25 30Ala Val His Thr Ala Arg Gly Leu Arg Gly Arg Pro Arg Arg Gln Leu Leu Arg Pro Leu Arg Pro Ala Gln Gly Leu Ala Pro Gly Arg His Arg Leu Arg Pro Ala Val Leu Pro Leu His Leu Gln Pro Leu Pro Gly Leu Trp Gly Gly His Ala Glu Trp Ala Ala Leu Leu Tyr Tyr Gly Pro Phe 90 Ile Val Ile Phe Gln Phe Gly Trp Ala Ser Thr Gln Ile Ser His Leu 105 Ser Leu Ile Pro Glu Leu Val Thr Asn Asp His Glu Lys Val Glu Leu 120 Thr Ala Leu Arg Tyr Ala Phe Thr Val Val Ala Asn Ile Thr Val Tyr Gly Ala Ala Trp Leu Leu Leu His Leu Gln Gly Ser Ser Arg Val Glu
145 150 155 160 Pro Thr Gln Asp Ile Ser Ile Ser Asp Gln Leu Gly Gly Gln Asp Val Pro Val Phe Arg Asn Leu Ser Leu Leu Val Val Gly Val Gly Ala Val Phe Ser Leu Leu Phe His Leu Gly Thr Arg Glu Arg Arg Pro His Ala Glu Glu Pro Gly Glu His Thr Pro Leu Leu Ala Pro Ala Thr Ala 215 Gln Pro Leu Leu Trp Lys His Trp Leu Arg Glu Pro Ala Phe Tyr Gln Val Gly Ile Leu Tyr Met Thr Thr Arg Leu Ile Val Asn Leu Ser Gln Thr Tyr Met Ala Met Tyr Leu Thr Tyr Ser Leu His Leu Pro Lys 265

Lys Phe Ile Ala Thr Ile Pro Leu Val Met Tyr Leu Ser Gly Phe Leu 275 280 285

Ser Ser Phe Leu Met Lys Pro Ile Asn Lys Cys Ile Gly Arg Asn Met

Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala Trp Val 305 310310315

Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala Val Leu 325 $$ 330 $$ 335

Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala Met Thr 340 345

Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Xaa Phe Val Tyr Gly $355 \\ 360 \\ 360 \\ 365$

Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu Ala Val Met Ala 370 380

Ile Gln Ser Leu His Pro Cys Pro Ser Glu Leu Cys Cys Arg Ala Cys 385 390 395 400

Val Ser Phe Tyr His Trp Ala Met Val Ala Val Thr Gly Gly Val Gly 405 410 415

Val Ala Ala Leu Cys Leu Cys Ser Leu Leu Leu Trp Pro Thr Arg $420 \hspace{1.5cm} 425 \hspace{1.5cm} 430$

Leu Arg Arg Trp Asp Arg Asp Ala Arg Pro

<210> 150

<211> 75 <212> PRT

<213> Homo sapiens

<400> 150

Met Ser Arg Phe Ile Leu Asn His Leu Val Leu Ala Ile Pro Leu Arg $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Val Leu Val Val Leu Trp Ala Phe Val Leu Gly Leu Ser Arg Val Met $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Leu Gly Arg His Asn Val Thr Asp Val Ala Phe Gly Phe Phe Leu Gly $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Met Gln Tyr Ser Ile Val Asp Tyr Cys Trp Leu Ser Pro His Asn 50 60

Ala Pro Val Leu Phe Leu Leu Trp Ser Gln Arg

<210> 151

<211> 51

<212> PRT

<213> Homo sapiens

<400> 151

Met Ala Gly Trp Phe Arg Gly Phe Phe Gly Phe Leu Phe Phe Phe Leu 1 10 15

Cys Leu Phe Asn Leu Lys Leu Phe Lys Leu Lys His Ser Gln Met Phe $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Gly Gly Lys His Pro Leu Lys Met Gly Pro Cys Ala Cys Leu Leu Gly

Leu

35 40 45 Arg Arg Ser 50 <210> 152 <211> 209 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <400> 152 Met Ala Xaa Ser Ser Arg Gly Asn Ala Asp Ser Ile Val Ala Ser Leu Val Leu Met Val Leu Tyr Leu Ile Lys Lys Arg Leu Val Ala Cys Ala Ala Val Phe Tyr Gly Phe Xaa Val His Met Lys Ile Tyr Pro Val Thr $35 \ \ \, 40 \ \ \, 45$ Tyr Ile Leu Pro Ile Thr Leu His Leu Leu Pro Asp Arg Asp Asn Asp Lys Ser Leu Arg Gln Phe Arg Tyr Thr Phe Gln Ala Cys Leu Tyr Glu Leu Leu Lys Lys Leu Cys Asn Arg Ala Val Leu Leu Phe Val Ala Val Ala Gly Leu Thr Phe Phe Ala Leu Ser Phe Gly Phe Tyr Tyr Glu Tyr Gly Trp Glu Phe Leu Glu His Thr Tyr Phe Tyr His Leu Thr Arg Arg Asp Ile Arg His Asn Phe Ser Pro Tyr Phe Tyr Met Leu Tyr Leu Thr Ala Glu Ser Lys Trp Ser Phe Ser Leu Gly Ile Ala Ala Phe Leu Pro 145 150 155 160 Gln Leu Ile Leu Leu Ser Ala Val Ser Phe Ala Tyr Tyr Arg Asp Leu Val Phe Cys Cys Phe Leu His Thr Ser Ile Phe Val Thr Phe Asn Lys

Val Cys Thr Ser Gln Tyr Phe Leu Trp Val Pro Leu Ala Tyr Cys Leu 195 200 205

195

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<210> 153
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<212> PRT
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<400> 153
Met Arg Ala Leu Leu Ala Leu Cys Leu Leu Gly Trp Leu Arg Trp
Gly Pro Ala Gly Ala Gln Gln Ser Gly Glu Tyr Cys His Gly Trp Val
Asp Val Gln Gly Asn Tyr His Glu Gly Phe Gln Cys Pro Glu Asp Phe
Asp Thr Leu Asp Ala Thr Ile Cys Cys Gly Ser Cys Ala Leu Arg Tyr
Cys Cys Ala Ala Ala Asp Ala Arg Leu Glu Gln Gly Gly Cys Thr Asn
Asp Arg Arg Glu Leu Glu His Pro Gly Ile Thr Ala Gln Pro Val Tyr
Val Pro Phe Leu Ile Val Gly Ser Ile Phe Ile Ala Phe Ile Ile Leu
Gly Ser Val Val Ala Ile Tyr Cys Cys Thr Cys Leu Arg Pro Lys Glu
Pro Ser Gln Gln Pro Ile Arg Phe Ser Leu Arg Ser Tyr Gln Thr Glu
Thr Leu Pro Met Ile Leu Thr Ser Thr Ser Pro Arg Ala Pro Ser Arg
145
Gln Ser Ser Thr Ala Thr Ser Xaa Ser Phe Thr Gly Gly Xaa Ile Arg
Arg Phe Phe Ser Ala Ile Trp Phe Pro Gly Val Thr Pro Val Phe Arg
Leu Pro Pro Ser Ala Xaa Ala Pro Thr Gly Trp Glu Glu Leu Ser Arg
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200

Leu Ser Val Pro Xaa Asp Thr Pro Arg Pro 210 215

<210> 154

<211> 49 <212> PRT

<213> Homo sapiens

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 154

Met Gly Ala His Ser Phe Gly Phe Gln Leu Phe Met Ser Val Ser Val 1 5 10 15

Leu Trp Gly Arg Leu Cys Leu Tyr Gly Arg Phe Ser Val Ile Thr Phe 20 25 30

Ala Ser Pro Pro Thr Thr Phe Met Xaa Ile Gln Cys Cys Ser His Cys

Ser

<210> 155

<211> 40 <212> PRT

<213> Homo sapiens

<400> 155

Met His Ile His Leu Asp Thr Ser Ser Leu Lys Thr Leu His Leu Gly
1 5 10 15

Thr Leu Phe Phe Leu Phe Tyr Leu Ala Leu Thr Gln Asn Glu Glu Asn 20 25 30

Ile Cys Asp Gly Lys Val Thr Leu 35 40

<210> 156

<211> 107

<212> PRT <213> Homo sapiens

<400> 156

Met Pro Ile Ile Val Leu Ile Leu Val Ser Leu Leu Ser Gln Leu Met 1 5 10 15

Val Ser Asn Pro Pro Tyr Ser Leu Tyr Pro Arg Ser Gly Thr Gly Gln $20 \\ 20 \\ 25$

Thr Ile Lys Met Gln Thr Glu Asn Leu Gly Val Val Tyr Tyr Val Asn 35 40 45

Lys Asp Phe Lys Asn Glu Tyr Lys Gly Met Leu Leu Gln Lys Val Glu 50 60

Lys Ser Val Glu Glu Asp Tyr Val Thr Asn Ile Arg Asn Asn Cys Trp

65 70 75 80 Lys Glu Arg Gln Gln Lys Thr Asp Met Gln Tyr Ala Ala Lys Val Tyr 85 90 95 Arg Asp Asp Arg Leu Arg Arg Gln Met Pro

Arg Asp Asp Arg Leu Arg Arg Arg Gln Met 100 105

<210> 157 <211> 156

<212> PRT <213> Homo sapiens

<400> 157

Met Gln Ala Ser Leu Trp Glu Pro Pro Arg Ser Gly Leu Pro Leu Trp $1 \hspace{1cm} 1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Glu Gly Leu Thr Phe Phe Tyr Cys Tyr Met Leu Leu Leu Val Leu 20 $$ 25 $$ 30

Pro Cys Val Ala Leu Ser Glu Val Ser Met Gln Gly Glu His Ile Ala 35 40 45

Pro Gln Lys Met Met Leu Tyr Pro Val Leu Ser Leu Ala Thr Val Asn 50 60

Val Val Ala Val Leu Ala Arg Ala Ala Asn Met Ala Leu Phe Arg Asp 65 70 75 80

Ser Arg Val Ser Ala Ile Phe Val Gly Lys Asn Val Val Ala Leu Ala 85 90 91 Phe Leu Glu Tyr Arg Arg Gln Val Arg Asp Phe

100 105 110

Pro Pro Pro Ala Leu Ser Leu Glu Leu Gln Pro Pro Pro Pro Gln Arg

Asn Ser Val Pro Pro Pro Pro Pro Leu His Gly Pro Pro Gly Arg Pro 130 135

His Met Ser Ser Pro Thr Arg Asp Pro Leu Asp Thr 145 150 155

<210> 158

<211> 150 <212> PRT

<213> Homo sapiens

Asp Gly Phe Trp Thr Tyr Ile Thr Gln Ile Ala Thr Cys Ser Pro Trp 35 40 45

Met Phe Trp Met Phe Leu Asn Ser Val Phe His Phe Met Trp Val Ala 50 60

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Val Leu Leu Met Cys Gln Met Tyr Gln Ile Ser Cys Leu Gly Ile Thr
Thr Asn Glu Arg Met Asn Ala Arg Arg Tyr Lys His Phe Lys Val Thr
Thr Thr Ser Ile Glu Ser Pro Phe Asn His Gly Cys Val Arg Asn Ile
Ile Asp Phe Phe Glu Phe Arg Cys Cys Gly Leu Phe Arg Pro Val Ile
Val Asp Trp Thr Arg Gln Tyr Thr Ile Glu Tyr Asp Gln Ile Ser Gly
Ser Gly Tyr Gln Leu Val
145
<210> 159
<211> 70
<212> PRT
<213> Homo sapiens
<400> 159
Met Ala Leu Thr Leu Leu Leu Ile Gln Ile Ile Phe Leu Ala Leu Gly
Lys Ile Ser Phe Ile Phe Val Cys Cys Lys Asp Gly Phe Ala Arg Ile
Ser His Asp Gln Asp Lys Leu Pro Ile Gln Lys Pro Thr Asp Thr Asn
Tyr Ile Met Arg Lys Lys Cys Ile Gln Leu Gly His Ile Ser Phe Glu 50 60
Leu Phe Gly Leu Lys Ala
<210> 160
<211> 490
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 160
Met Leu Ala Leu Thr Phe Met Phe Met Val Leu Glu Val Val Val Ser
Arg Val Thr Ser Ser Leu Ala Met Leu Ser Asp Ser Phe His Met Leu
```

Ser Asp Val Leu Ala Leu Val Val Ala Leu Val Ala Glu Arg Phe Ala

40

35

Arg Arg Thr His Ala Thr Gln Lys Asn Thr Phe Gly Trp Ile Arg Ala Glu Val Met Gly Ala Leu Val Asn Ala Ile Phe Leu Thr Gly Leu Cys Phe Ala Ile Leu Leu Glu Ala Ile Glu Arg Phe Ile Glu Pro His Glu 85 90 95 Met Gln Gln Pro Leu Val Val Leu Gly Val Gly Val Ala Gly Leu Leu Val Asn Val Leu Gly Leu Cys Leu Phe His His His Ser Gly Phe Ser Gln Asp Ser Gly His Xaa His Ser His Gly Gly His Gly His Gly His Gly Leu Pro Lys Gly Pro Arg Val Lys Ser Thr Arg Pro Gly Ser Ser 145 150 155 160 Asp Ile Asn Val Ala Pro Gly Glu Gln Gly Pro Asp Gln Glu Glu Thr 165 170 175 Asn Thr Leu Val Ala Asn Thr Ser Asn Ser Asn Gly Leu Lys Leu Asp Pro Ala Asp Pro Glu Asn Pro Arg Ser Gly Asp Thr Val Glu Val Gln 195 200 205 Val Asn Gly Asn Leu Val Arg Glu Pro Asp His Met Glu Leu Glu Glu Asp Arg Ala Gly Gln Leu Asn Met Arg Gly Val Phe Leu His Val Leu 225 230 235 240 Gly Asp Ala Leu Gly Ser Val Ile Val Val Val Asn Ala Leu Val Phe Tyr Phe Ser Trp Lys Gly Cys Ser Glu Gly Asp Phe Cys Val Asn Pro 260 265 270Cys Phe Pro Asp Pro Cys Lys Pro Phe Val Glu Ile Ile Asn Ser Thr 275 280 285 His Ala Ser Val Tyr Glu Ala Gly Pro Cys Trp Val Leu Tyr Leu Asp Pro Thr Leu Cys Val Val Met Val Cys Ile Leu Leu Tyr Thr Thr Tyr

Val Glu Val His Glu Leu His Val Trp Gln Leu Ala Gly Ser Arg $_{350}$ Ile Ile Ala Thr Ala His Ile Lys Cys Glu Asp Pro Thr Ser Tyr Met $_{370}$ Glu Val Ala Lys Xaa Ile Lys Asp Val Phe His Asn His Gly Ile His

Pro Leu Leu Lys Glu Ser Ala Leu Ile Leu Leu Gln Thr Val Pro Lys 325 335

Gln Ile Asp Ile Arg Asn Leu Ile Lys Glu Leu Arg Asn Val Glu Gly 345 350

400 385 390 395 Ala Thr Thr Ile Gln Pro Glu Phe Ala Ser Val Gly Ser Lys Ser Ser Val Val Pro Cys Glu Leu Ala Cys Arg Thr Gln Cys Ala Leu Lys Gln
420 425 430 Cys Cys Gly Thr Leu Pro Gln Ala Pro Ser Gly Lys Asp Ala Glu Lys Thr Pro Ala Val Ser Ile Ser Cys Leu Glu Leu Ser Asn Asn Leu Glu Lys Lys Pro Arg Arg Thr Lys Ala Glu Asn Ile Pro Ala Val Val Ile Glu Ile Lys Asn Met Pro Lys Gln Thr Thr 485 <210> 161 <211> 31 <212> PRT <213> Homo sapiens <400> 161 Met Gln Pro Cys Val Ile Ser Trp Glu Gln Cys Ser Phe Val Ser Pro Arg Gly Pro His Val Tyr Ile Cys Phe His Asp Gln Arg Arg Phe <210> 162 <211> 115 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (100) <223> Xaa equals any of the naturally occurring L-amino acids <400> 162 Met Leu Gly Leu Leu Gly Ser Thr Ala Leu Val Gly Trp Ile Thr Gly Ala Ala Val Ala Val Leu Leu Leu Leu Leu Leu Leu Ala Thr Cys Leu Phe His Gly Arg Gln Asp Cys Asp Val Glu Arg Asn Arg Thr Ala Ala Gly Gly Asn Arg Val Arg Arg Ala Gln Pro Trp Pro Phe Arg Arg Arg Gly His Leu Gly Ile Phe His His His Arg His Pro Gly His Val Ser His Val Pro Asn Val Gly Leu His His His His Bro Arg His Xaa Pro His His Xaa His His His His Pro His Arg His His Pro Arg

His Ala Arg

<210> 163 <211> 473

<212> PRT

<213> Homo sapiens

<400> 163 Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu

Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile

Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu

Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr

Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser

Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 195 200 205

Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala

Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg 245 250 255

 Leu Asn
 Asp Asn Pan Pro 1
 Trp Val Cys Pasp Cys Pasp Cys Pasp Arg Ala Pro 1
 Arg Pro 265
 Res 265
 Cys Pasp Arg Ala Pro 270
 Leu Trp 275
 Leu Gln Lys Phe Parg 280
 Ser Es Es Es Glu Val Pro 285
 Ala Pro 285
 Pro 285
 Ser 285
 Leu Lys Arg Leu Ala Pro 285
 Ala Pro 285
 Pro 285
 Pro 300
 Leu Ala Ala Ala Asn Asn 300
 Leu Ala Ala Ala Asn 300
 Trp 315
 The Trp 310
 The Trp 310

Val Leu Trp Thr Val Leu Gly Pro Cys

<210> 164 <211> 91

<212> PRT

<213> Homo sapiens

85 90

<210> 165

<211> 44 <212> PRT

<213> Homo sapiens

<400> 165

Met Lys Lys His Thr Lys Cys Gln Trp Leu Lys Met Thr Ile Leu Phe 1 5 10 15

Pro Glu Val Leu Gly Leu Leu Met Pro His Pro Leu 35 40

<210> 166

<211> 45 <212> PRT

<213> Homo sapiens

<400> 166

Met Ser Cys Gly Cys Cys Phe Ile His Ile Tyr Asn Leu Leu Ser $\frac{1}{5}$ $\frac{10}{10}$

Leu Cys Tyr Gly Leu Gly Val Glu Arg Val Lys Phe Phe Thr Phe Ser 20 25 30

Ile Leu Lys Lys Glu Thr Met Leu Leu Asn Tyr Leu Phe 35 40 45

<210> 167 <211> 128

<211> 128 <212> PRT

<213> Homo sapiens

<400> 167

Met Leu Ser Ser Pro Ile Leu Ala Ser Gly Pro Ala Trp Leu Ala Cys

Ser Phe Ser His Val Gln Trp Trp Val Cys Leu Ile Ala Gln Val Gln 20 25 30

Phe Ser Ala Ala Thr Val Ser Pro Gly Arg Ala Gly Thr Gly Ala Ala 35 40 45

Pro Ser Val Pro Ala Val Trp Ala Ala Glu Ala Arg Gly Pro Ser Val 50 60

Pro Ser Thr Leu Gln Gly Ser Pro Val Leu Gln Arg Asp Leu Ala Asn 65 70 75 80

115

120

125

<210> 168

<211> 57 <212> PRT

<213> Homo sapiens

<400> 168

Met His Pro Trp Arg Leu Ser Met Cys Pro Ala Cys Val Leu Ala Ala 1 1 15

Leu Pro Ala Leu Cys Ser Cys Leu Cys Ser Pro Asp Ala Arg Pro Pro 20 25 30

His Gly Trp Met Ser Met Pro Phe Thr Pro His Pro Leu Val Ser Arg 35 40 45

Ala Met Pro Thr Cys His Pro Cys Ser 50 55

<210> 169

<211> 97 <212> PRT

<213> Homo sapiens

<400> 169

Met Tyr Arg Ala Ile Asp Ser Phe Pro Arg Trp Arg Ser Tyr Phe Tyr 1 10 15

Phe Ile Thr Leu Ile Phe Phe Leu Ala Trp Leu Val Lys Asn Val Phe

Ile Ala Val Ile Ile Glu Thr Phe Ala Glu Ile Arg Val Gln Phe Gln

Gln Met Trp Gly Ser Arg Ser Ser Thr Thr Ser Thr Ala Thr Thr Gln

Met Phe His Glu Asp Ala Ala Gly Gly Trp Gln Leu Val Ala Val Gly 65 70 75 80

Cys Gln Gln Ala Pro Gly Thr Arg Pro Ser Leu Pro Pro Gly Ala Val

Gln

<210> 170

<211> 59

<212> PRT

<213> Homo sapiens

<400> 170

Met Thr Ser Phe Cys Glu Met Leu Lys Gly Ser Ala Ala Gly Cys Leu 1 10 15

Val Leu Leu Ala Phe Ala Phe Tyr Leu Ala Cys Ser Phe Ser His Lys

25 30 20 Thr Lys Ser His Ser His Tyr Ala Leu Phe Ile Leu Gln Asp Tyr Leu Leu Gly Asn Phe Tyr Tyr Ile Pro Leu Ser Pro <210> 171 <211> 42 <212> PRT <213> Homo sapiens <400> 171 Met Ser Val Ala His Met His Ala Cys Val Phe Leu Cys Ala Cys Val Phe Cys Leu Ala Glu Asn Ala Leu Glu Ser Val Ile Ile Leu Cys Tyr Ser Tyr Asn Lys Asp Glu Val Arg Glu His 35 <210> 172 <211> 54 <212> PRT <213> Homo sapiens <400> 172 Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly Arg Arg Arg Lys Asn Ser Phe Leu Phe Leu Leu Ser Phe Ser Ile Glu Phe Leu Leu Cys Val Trp 50 <210> 173 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <400> 173 Met Cys Lys Ala Val Cys Lys His Arg Leu Xaa Leu Phe Ala Val Ser Ser Phe Ser Leu Gly Leu Gly Trp Val Cys Val Leu Val Leu Met Leu

Trp Pro Val Arg Leu Ser Leu Ala Pro Arg Pro Val Gln Leu Gln Gln

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Arg Arg Ser His Cys
<210> 174
<211> 53
<212> PRT
<213> Homo sapiens
<400> 174
Met Phe Thr Ala Pro Leu Phe Phe Phe Phe Phe Phe Glu Ile Ile Asn
Ser Met Arg Asn Leu Gly Leu Asn Ile Cys Leu Leu Cys Leu Leu Ile
Glu His His Ser Arg Pro Ser Val Cys Leu Pro Phe Thr Pro Lys Ile
                              40
Leu Thr Lys Lys Phe
     50
<210> 175
<211> 48
<212> PRT
<213> Homo sapiens
<400> 175
Met Leu Cys Phe Leu Pro Ile Pro Leu Leu Ser Ile Leu Ser Pro Gln
Thr Gln Ala Ser Arg Leu Leu Asp Glu Thr Val Arg Arg Lys His Phe
Leu Thr Tyr Pro Phe Gly Ile Ser Ser Ile Ile Thr Gln Ala Leu Leu ^{46}
<210> 176
<211> 224
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 176
Met Val Leu Val Ala Leu Ile Leu Leu His Ser Ala Leu Ala Gln Ser
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Arg Arg Asp Phe Ala Pro Pro Gly Gln Gln Lys Arg Glu Ala Pro Val

25 Asp Val Leu Thr Gln Ile Gly Arg Ser Val Arg Gly Thr Leu Asp Ala Trp Ile Gly Pro Glu Thr Met His Leu Val Ser Glu Ser Ser Ser Gln Val Leu Trp Ala Ile Ser Ser Ala Ile Ser Val Ala Phe Phe Ala Leu Ser Gly Ile Ala Ala Gln Leu Leu Asn Ala Leu Gly Leu Ala Gly Asp Tyr Leu Ala Gln Gly Leu Lys Leu Ser Pro Gly Gln Val Gln Thr Phe Leu Leu Trp Gly Ala Gly Ala Leu Val Val Tyr Trp Leu Leu Ser Leu Leu Leu Gly Leu Val Leu Ala Leu Leu Gly Arg Ile Leu Trp Gly Leu Lys Leu Val Ile Phe Leu Ala Gly Phe Val Ala Leu Met Arg Ser Val Pro Asp Pro Ser Thr Arg Ala Leu Leu Leu Leu Ala Leu Leu Ile Leu Tyr Ala Leu Leu Ser Arg Xaa Thr Gly Ser Arg Ala Ser Gly Ala Gln

Leu Glu Ala Lys Val Arg Gly Leu Glu Arg Gln Val Glu Glu Leu Arg 200 Trp Arg Gln Arg Gln Xaa Ala Lys Gly Ala Arg Ser Val Glu Glu Glu

<210> 177 <211> 200

<212> PRT <213> Homo sapiens

<220>

<221> SITE <222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (27) <223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (50)

195

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<210> 178
<211> 93
<212> PRT
<213> Homo sapiens
<400> 178
Met Pro Arg Ala Thr Leu Trp Gly His Leu Ser Pro Ala Trp Val Leu
Val Pro Trp Thr Pro Arg Ala Cys Gly Gln Ala Ala Pro Gly Arg Gly
His Val Ala Ser Asp His Lys Ser Gly Leu Pro Trp Pro Lys His Cys
Ser Cys Leu His Pro Arg Ala Ser Gln Pro Cys Leu Phe Ser Leu Asn
Ser Asn Arg Thr Val Phe Thr Ala Ile Gln Arg Val Ala Leu Gly Trp
Thr Phe Trp Val Gln Ala Asn Leu Val Pro Arg Cys Thr
<210> 179
<211> 404
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (77)
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<220>
<221> SITE
<222> (96)
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<222> (122)
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<222> (124)
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<220>
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<222> (309)
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<221> SITE
<222> (335)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (389)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 179
Met His Pro Ile Pro Ser Ser Phe Met Ile Lys Ala Val Ser Ser Phe
                                      10
                                                          15
Leu Thr Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe Met
Lys Val Leu Gln Ala Arg Lys Asn Xaa Thr Ser Thr Glu Leu Ile Val
Glu Pro Glu Glu Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly Phe
Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Xaa Ile Ser Thr
Leu Ser Tyr Ile Leu Pro Tyr Phe Ser Ala Val Asn Leu Asp Val Xaa
                 85
                                      90
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Ser Xaa Leu Leu Pro Phe Ile Lys Leu Pro Thr Xaa Gly Asn Ser Leu Ala Lys Ile Gln Thr Val Gly Gln Asn Xaa Gln Xaa Val Xaa Arg Val 120 Leu Met Gly Pro Arg Ser Ile Gln Lys Arg His Phe Lys Glu Val Gly Arg Gln Ser Ile Arg Arg Glu Gln Gly Ala Gln Ala Ser Val Glu Asn Ala Ala Glu Glu Lys Arg Leu Gly Ser Pro Ala Pro Arg Glu Xaa Glu Gln Pro His Thr Gln Gln Gly Pro Glu Lys Leu Ala Gly Asn Ala Xaa Tyr Thr Lys Pro Ser Phe Thr Gln Glu His Lys Ala Ala Val Ser Val 200 Leu Xaa Pro Phe Ser Lys Gly Ala Pro Ser Thr Ser Ser Pro Ala Lys Ala Leu Pro Gln Val Arg Asp Arg Trp Lys Asp Xaa Thr His Xaa Ile Ser Ile Leu Glu Ser Ala Lys Ala Arg Val Thr Asn Met Lys Ala Ser Lys Pro Ile Ser His Ser Arg Lys Lys Tyr Arg Phe His Lys Thr Arg Ser Arg Met Thr His Arg Thr Pro Lys Val Lys Lys Ser Pro Lys Phe Arg Lys Lys Ser Tyr Leu Ser Arg Leu Met Leu Ala Asn Arg Pro Pro Phe Ser Ala Ala Xaa Ser Leu Ile Asn Ser Pro Ser Gln Gly Ala Phe 310 305 Ser Ser Leu Gly Asp Leu Ser Pro Gln Glu Asn Pro Phe Leu Xaa Val Ser Ala Pro Ser Glu His Phe Ile Glu Thr Thr Asn Ile Lys Asp Thr Thr Ala Arg Asn Ala Leu Glu Glu Asn Val Phe Met Glu Asn Thr Asn Met Pro Glu Val Thr Ile Ser Glu Asn Thr Asn Tyr Asn His Pro Pro Glu Ala Asp Ser Xaa Gly Thr Ala Phe Asn Leu Gly Pro Thr Val Lys

Gln Thr Glu Thr

<210> 180 <211> 387

<211> 387 <212> PRT

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<213> Homo sapiens
<220>
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<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (359)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 180
Met Gly Ala Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala His
Gly Ala Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp
Arg Val Glu Met Glu Asp Ala His Thr Ala Val Val Gly Ile Pro His
Gly Leu Glu Asp Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly
Ser Arg Val Ala Asn Tyr Cys Ser Thr His Leu Leu Glu His Ile Thr 65 70 75 80
Thr Asn Glu Asp Phe Arg Ala Ala Gly Lys Ser Gly Ser Ala Leu Glu
85 90 95
Leu Ser Val Glu Asn Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Lys
Ile Asp Glu Tyr Met Arg Asn Phe Ser Asp Leu Arg Asn Gly Met Asp
Arg Ser Gly Ser Thr Ala Val Gly Val Met Ile Ser Pro Lys His Ile
Tyr Phe Ile Asn Cys Gly Asp Ser Arg Ala Val Leu Tyr Arg Asn Gly 145 $^{\circ}
Gln Val Cys Phe Ser Thr Gln Asp His Lys Pro Cys Asn Pro Arg Glu
Lys Glu Arg Ile Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val
Asn Gly Ser Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys
Cys Val Asp Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro
Glu Val Tyr Xaa Ile Leu Arg Ala Glu Glu Asp Glu Phe Ile Ile Leu
Ala Cys Asp Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys Glu
Tyr Val Lys Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn Val Cys
Asn Trp Val Val Asp Thr Cys Leu His Lys Gly Ser Arg Asp Asn Met
```

Ser Ile Val Leu Val Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu Ala Val Lys Lys Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met Glu Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met Arg Ile Leu Ser Ala Glu Asn Ile Pro Asn Leu Pro Pro Gly Gly Gly Leu Ala Gly Kaa Arg Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn Pro His Arg Glu Ser Asp Gly Gly Ala Gly Asp Leu Glu Asp Pro Trp 385 <210> 181 <211> 145 <212> PRT <213> Homo sapiens <400> 181 Met Ala Phe Phe Thr Gly Leu Trp Gly Pro Phe Thr Cys Val Ser Arg Val Leu Ser His His Cys Phe Ser Thr Thr Gly Ser Leu Ser Ala Ile Gln Lys Met Thr Arg Val Arg Val Val Asp Asn Ser Ala Leu Gly Asn Ser Pro Tyr His Arg Ala Pro Arg Cys Ile His Val Tyr Lys Lys Asn Gly Val Gly Lys Val Gly Asp Gln Ile Leu Leu Ala Ile Lys Gly Gln Lys Lys Lys Ala Leu Ile Val Gly His Cys Met Pro Gly Pro Arg Met Thr Pro Arg Phe Asp Ser Asn Asn Val Val Leu Ile Glu Asp Asn Gly Asn Pro Val Gly Thr Arg Ile Lys Thr Pro Ile Pro Thr Ser Leu Arg Lys Arg Glu Gly Glu Tyr Ser Lys Val Leu Ala Ile Ala Gln Asn Phe Va1

<210> 182 <211> 140

145

<212> PRT <213> Homo sapiens

<210> 183 <211> 127

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<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 182
Met Phe Phe Ser Leu Pro Gly Leu Trp Gln Ile Ala Ser Phe Thr His
Asn Leu Ile Phe His Leu Trp Val Trp Gly Ser Glu Ser Gly Glu His
Leu Gln Ser His Asn Asp Pro Asp Thr Arg Gln Gly Gly His Ile Pro
Ile Arg Leu Leu Gly Glu Ser Ser Ala Ser Val Pro Gly Ser Ser Glu
Gly His Thr Gly Gly Pro Ala Pro Pro Arg Val Gly Gly Ser Ala Gly
Ile Ile Arg Thr His Val Val Phe Leu Val Ser Trp Pro Leu Leu Gln
Arg Glu Gln His Arg Leu Ser Trp Lys Leu Pro Ser Val Met Trp Gly
Asp Ser Arg Glu Pro His Leu Ala Arg Leu Asp Gln Ser Lys Trp Pro
Xaa Ala Thr Xaa Ala Xaa Gln Tyr Leu Gly Arg Gly
```

Phe Phe Ile Gln Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser

Phe Leu Ser Lys Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val 105 100

Ile Ile Ser Asp Asn Ala Leu Thr Met Thr Ala Ser Thr Trp Arg 120

<210> 184

<211> 146 <212> PRT

<213> Homo sapiens

<400> 184

Met Gln Gln Ser Arg Leu Leu Pro Phe Leu Phe Phe Leu Leu Glu

Gly Cys Ala Pro Ser Ser Leu Gly Pro Gly Ala Ala Pro Gly Ser Gly His Ser Leu Gly Pro Pro Gly Ser Pro Gly Ala Pro Gly Pro Gln Pro

Ala Val Gly Pro Ser Ser Pro Cys Gln Pro Gly Pro Ser Pro Ser Ser

Pro Ala Ala Ala Ala Ser Ser Gln Ser Ser Val Ala Ser Trp Pro

Cys Thr Leu Arg Cys Ala Ala Pro Ser Pro Asp Ala Ser Ala Leu Arg

Pro Ala Ala Ser Pro Ala Ala Thr Pro Ala Trp Ser Pro Gly Ser Gly 105

Thr Ile Arg Val Leu Arg Pro Pro Ala Pro Ala Ala Ala Pro Ala Thr

Ala Ile Thr Asn Arg Gly Pro Pro Arg Arg Arg Arg Asn Ala Arg

Thr Ala 145

<210> 185 <211> 68

<212> PRT

<213> Homo sapiens

<400> 185

Met Lys Pro Thr Arg Ser Leu Trp Ile Ser Phe Leu Met Cys Cys Trp

Ile Trp Phe Ala Asn Ile Leu Leu Arg Ile Phe Ala Ser Val Phe Phe

Arg Asp Ile Gly Leu Lys Phe Ser Phe Phe Cys Cys Val Ser Ala Arg

Leu Trp Tyr Gln Asp Asp Ala Gly Leu Ile Asn Glu Leu Gly Arg Ile

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55
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     50
Pro Ser Phe Tyr
<210> 186
<211> 51
<212> PRT
<213> Homo sapiens
<400> 186
Met Thr Pro Val Phe Arg Ala Trp Gly Leu Trp Val Tyr Val Leu Pro
Thr Gly Phe Pro Gly Pro Cys Cys Met Met Leu Leu Glu Leu Phe Pro
Lys Glu Ser Val Pro Gln Ala Tyr Gln Gly Ile Leu Leu Tyr Leu His
Phe Gly Phe
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<210> 187
<211> 85
<212> PRT
<213> Homo sapiens
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<400> 187
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Ser Cys Pro Pro Arg Ala Trp Pro Glu Val Glu Ala Pro Glu Ala Pro
Ala Leu Pro Val Val Pro Glu Leu Pro Glu Val Pro Met Glu Met Pro 35 40 45
Leu Val Leu Pro Pro Glu Leu Glu Leu Leu Ser Leu Glu Ala Val His
Arg Tyr Gln Xaa Gly Gly Thr Leu Met Gly Trp Thr Arg Ala Glu Ala 65 70 75 80
 Ser Ala Asn Gly Ser
 <210> 188
 <211> 191
 <212> PRT
 <213> Homo sapiens
 <400> 188
 Met Gly Asp His Leu Asp Leu Leu Leu Gly Val Val Leu Met Ala Gly 1 5 10 15
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 Pro
 Val
 Phe
 Gly
 Ile
 Pro
 Ser
 Cys
 Ser
 Phe
 Asp
 Gly
 Ala
 Phe
 Asp
 Gly
 Asp
 Cys
 Asp
 Leu
 Asp
 Cys
 Ser
 Phe
 Asp
 Gln
 Val
 Pro
 Gln
 Val
 Pro
 Asp
 Asp
 Asp
 Tyr
 Ile
 Arg
 Tr
 Val
 Thr
 Ala
 Ser
 Gln
 Leu
 Gln
 Leu
 Leu
 Asp
 Leu
 Gln
 Leu
 Cheu
 Cheu
 Gln
 Leu
 Cheu
 Cheu
 Gln
 Leu
 Cheu
 Cheu
 Gln
 Leu
 Cheu
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 Cheu
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<210> 189 <211> 231

<212> PRT <213> Homo sapiens

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Arg Arg Arg Gly Pro Phe Leu Ser Ser Cys Arg Asn Asp Val Met Arg
Asn Cys Val Pro Arg His Ala Val Leu Val Thr Thr Cys Val Phe Val
Ser Phe Pro Thr His Cys Lys Val Gly Ile Thr Gly Pro Ile Thr Gln
Val Lys Gln Lys Pro Gly Asn His Ser Ser Pro Cys Pro Val Ile Gln
Leu Val Ala Lys Ala Glu Phe Glu Leu Met Leu Pro Ser Val Pro Lys
                            200
Pro Val Tyr Leu Thr Leu Val Leu Ser Cys Trp Cys Leu Cys Asp Val
                        215
Pro Cys Leu Ser Val Ser Leu
<210> 190
<211> 68
<212> PRT
<213> Homo sapiens
<400> 190
Met Tyr Leu Glu Val Ala Val Arg Pro Phe Leu Ile Ile Val Ala Phe
Leu Gly Leu Ser Phe Leu Ala Leu Gln Met Pro Phe Trp Gln Gly Ser
Ala Val Gly His Leu Arg Ala Gly Gly Ala Gly Val Ala His Leu Ser
Gln Ala Gly Ile Ile Gln Ala Pro Val His Ser Gly Arg Glu Gly Gln
Pro Pro Pro Gly
<210> 191
<211> 211
<212> PRT
<213> Homo sapiens
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<220>
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<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 191
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
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Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro

20

Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 65 70 75 80 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly 85 90 95 Asn Asn Thr Xaa Ser Ser Xaa Leu Gln Ile Asp Lys Val Pro Arg Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe 115 120 125 His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser 145 150 155 160 Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly 165 170 175

Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser

Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser 195 200 205

Arg Gln Leu 210

<210> 192 <211> 90

<212> PRT <213> Homo sapiens <400> 192

Met Leu Val Val Ser Thr Val Ile Ile Val Phe Trp Glu Phe Ile Asn Ser Thr Glu Gly Ser Phe Leu Trp Ile Tyr His Ser Lys Asn Pro Glu

Val Asp Asp Ser Ser Ala Gln Lys Gly Trp Trp Phe Leu Ser Trp Phe

Asn Asn Gly Ile His Asn Tyr Gln Gln Gly Glu Glu Asp Ile Asp Lys

Glu Lys Gly Arg Glu Glu Thr Lys Gly Arg Lys Met Thr Gln Gln Ser

Phe Gly Tyr Gly Thr Gly Leu Ile Gln Thr

HILLIAM B. III B. BRIGHT BERTEN .

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<210> 193
<211> 62
<212> PRT
<213> Homo sapiens
<400> 193
Met Glu Leu Met Ala Leu Phe Phe Arg Thr Thr Thr Val Ala Ala Met
Ala Ser Arg Gly Ala Leu Ala Leu Phe Leu Arg Lys Ile Leu Ser Glu 20 25 30
Ala Lys Phe Lys Leu Ser Leu Thr Pro Gln Pro Pro Gln Pro Phe Tyr
Ile Tyr Met Ala Tyr Tyr Ser Glu Asn Phe Phe Leu Lys Phe 50 55 60
<210> 194
<211> 295
<212> PRT
<213> Homo sapiens
<400> 194
Met Leu Cys Cys Trp Phe Pro Trp Arg Ile Leu Ala Ala Gly Gln Val
Pro Tyr Ser Pro His Ser Pro Gln Val Ala Gly Cys Asp Leu Thr Arg
Cys Glu Ser Gly Gly Ala Arg Ala Leu Ser Ile Gln Arg Ala Ala Leu 35 40 45
Val Val Leu Glu Asn Tyr Tyr Lys Asp Phe Thr Ile Tyr Asn Pro Asn 50 60
Leu Leu Thr Ala Ser Lys Phe Arg Ala Ala Lys His Met Ala Gly Leu
Lys Val Tyr Asn Val Asp Gly Pro Ser Asn Asn Ala Thr Gly Gln Ser
Arg Ala Met Ile Ala Ala Ala Ala Arg Arg Arg Asp Ser Ser His Asn 100 \hspace{1.5cm} 105 \hspace{1.5cm} 105
Glu Leu Tyr Tyr Glu Glu Ala Glu His Glu Arg Arg Val Lys Lys Arg
115 120 125
Lys Ala Arg Leu Val Val Ala Val Glu Glu Ala Phe Ile His Ile Gln
Arg Leu Gln Ala Glu Glu Gln Gln Lys Ala Pro Gly Glu Val Met Asp
Pro Arg Glu Ala Ala Gln Ala Ile Phe Pro Ser Met Ala Arg Ala Leu
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with the feet of the second se

Gln Lys Tyr Leu Arg Ile Thr Arg Gln Gln Asn Tyr His Ser Met Glu
180

Ser Ile Leu Gln His Leu Ala Phe Cys Ile Thr Asn Gly Met Thr Pro
200

Lys Ala Phe Leu Glu Arg Tyr Leu Ser Ala Gly Pro Thr Leu Gln Tyr

215 220 210 Asp Lys Asp Arg Trp Leu Ser Thr Gln Trp Arg Leu Val Ser Asp Glu Ala Val Thr Asn Gly Leu Arg Asp Gly Ile Val Phe Val Leu Lys Cys $245 \hspace{1cm} 250 \hspace{1cm} 255$ Leu Asp Phe Ser Leu Val Val Asn Val Lys Lys Ile Pro Phe Ile Ile

Leu Ser Glu Glu Phe Ile Asp Pro Lys Ser His Lys Phe Val Leu Arg 275 280 285

Leu Gln Ser Glu Thr Ser Val

<210> 195 <211> 295

<212> PRT

<213> Homo sapiens <400> 195

Met Gly Leu Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly Cys Cys Ala Leu Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg

Arg Pro Glu Asp Ala Val Ala Pro Arg Lys Arg Ala Arg Arg Gln Arg Ala Arg Leu Gln Gly Ser Ala Thr Ala Ala Glu Ala Ser Leu Leu Arg $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$

Arg Thr His Leu Cys Ser Leu Ser Lys Ser Asp Thr Arg Leu His Glu Leu His Arg Gly Pro Arg Ser Ser Arg Ala Leu Arg Pro Ala Ser Met

Asp Leu Leu Arg Pro His Trp Leu Glu Val Ser Arg Asp Ile Thr Gly

Pro Gln Ala Ala Pro Ser Ala Phe Pro His Gln Glu Leu Pro Arg Ala

Leu Pro Ala Ala Ala Ala Thr Ala Gly Cys Ala Gly Leu Glu Ala Thr $130 \\ 135 \\ 140 \\ $

Tyr Ser Asn Val Gly Leu Ala Ala Leu Pro Gly Val Ser Leu Ala Ala

Ser Pro Val Val Ala Glu Tyr Ala Arg Val Gln Lys Arg Lys Gly Thr 165 170 175

His Arg Ser Pro Gln Glu Pro Gln Gln Gly Lys Thr Glu Val Thr Pro Ala Ala Gln Val Asp Val Leu Tyr Ser Arg Val Cys Lys Pro Lys Arg

Arg Asp Pro Gly Pro Thr Thr Asp Pro Leu Asp Pro Lys Gly Gln Gly 215

Ala Ile Leu Ala Leu Ala Gly Asp Leu Ala Tyr Gln Thr Leu Pro Leu 225 230 235 240 Arg Ala Leu Asp Val Asp Ser Gly Pro Leu Glu Asn Val Tyr Glu Ser Ile Arg Glu Leu Gly Asp Pro Ala Gly Arg Ser Ser Thr Cys Gly Ala 260 265 270

Gly Thr Pro Pro Ala Ser Ser Cys Pro Ser Leu Gly Arg Gly Trp Arg 275 280 285

Pro Leu Pro Ala Ser Leu Pro

<210> 196 <211> 338 <212> PRT

<213> Homo sapiens <400> 196 Met Met Arg Thr Cys Val Leu Leu Ser Ala Val Leu Trp Cys Leu Thr Gly Val Gln Cys Pro Arg Phe Thr Leu Phe Asn Lys Lys Gly Phe Ile Tyr Gly Lys Thr Gly Gln Pro Asp Lys Ile Tyr Val Glu Leu His Gln Asn Ser Pro Val Leu Ile Cys Met Asp Phe Lys Leu Ser Lys Lys Glu Ile Val Asp Pro Thr Tyr Leu Trp Ile Gly Pro Asn Glu Lys Thr Leu 65 70 75 80 Thr Gly Asn Asn Arg Ile Asn Ile Thr Glu Thr Gly Gln Leu Met Val Lys Asp Phe Leu Glu Pro Leu Ser Gly Leu Tyr Thr Cys Thr Leu Ser Tyr Lys Thr Val Lys Ala Glu Thr Gln Glu Glu Lys Thr Val Lys Lys Arg Tyr Asp Phe Met Val Phe Ala Tyr Arg Glu Pro Asp Tyr Ser Tyr 130 135 140 Gln Met Ala Val Arg Phe Thr Thr Arg Ser Cys Ile Gly Arg Tyr Asn 145 150 155 160 Asp Val Phe Phe Arg Val Leu Lys Lys Ile Leu Asp Ile Leu Ile Ser 165 170 175 Asp Leu Ser Cys His Val Ile Glu Pro Ser Tyr Lys Cys His Ser Val Glu Ile Pro Glu His Gly Leu Ile His Glu Leu Phe Ile Ala Phe Gln 195 200 205 Val Asn Pro Phe Ala Pro Gly Trp Lys Gly Ala Cys Asn Gly Ser Val 210 215 220 Asp Cys Glu Asp Thr Thr Asn His Asn Ile Leu Gln Ala Arg Asp Arg 225

Ile Glu Asp Phe Phe Arg Ser Gln Ala Tyr Ile Phe Tyr His Asn Phe 245

Asn Lys Thr Leu Pro Ala Met His Phe Val Asp His Ser Leu Gln Val 260

Val Arg Leu Asp Ser Cys Arg Pro Gly Phe Gly Lys Asn Glu Arg Leu 275 280 285

His Ser Asn Cys Ala Ser Cys Cys Val Val Cys Ser Pro Ala Thr Phe

Tyr Gly Ala Lys Ser Cys Pro Gln Thr Ser Asn Lys Asn Gln Gln Tyr 325 330 335

Glu Asp

<210> 197 <211> 78 <212> PRT

<213> Homo sapiens

<400> 197

Met Gin Gin Arg Gly Ala Ala Gly Ser Arg Gly Cys Ala Leu Phe Pro 1 15

Leu Leu Gly Val Leu Phe Phe Gin Val Ser Ala Pro Ala Gly Tyr Ala 20 25 30

Pro Leu Pro Ala Gly Gly Leu Gly Lys Met Val Ala Phe Pro Val Pro 35

Gly Arg Gly Val Ser Arg Lys Pro Pro His Ser Ser Gly Lys Glu Gly 50 60

Gly Arg Glu Arg Asp Val Gly Thr Met Ser Ser Pro Pro Arg

<210> 198

<211> 181 <212> PRT

<213> Homo sapiens

<400> 198

Met Met Leu Met Pro Tyr Gly Ala Leu Ile Ile Gly Phe Val Cys Gly 1 5 5 15 15 15 10

Ile Ile Ser Thr Leu Gly Phe Val Tyr Leu Thr Pro Phe Leu Glu Ser $20 \ \ 25 \ \ 30$

Arg Leu His Ile Gln Asp Thr Cys Gly Ile Asn Asn Leu His Gly Ile 35 40

and the state of the

 Ser Leu Glu Val Tyr
 Gly Lys Glu Gly Leu Val His Ser
 Phe Asp Phe Re 65

 Gln Gly Phe Asn Gly Sap Trp Thr Ala Arg Trp Gln Gln Gly Lys Phe Gln 90
 Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Trp Gln Gln Gly Lys Phe Gln 100

 Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu Met Gly Gly Ile 100
 Gly Free Asp 125

 Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly Gln Pro Ser Asp 125
 Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met Pro Glu Gly Asn 135

 Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys Pro Ser Gly Pro 145
 Ser Gly Pro 150

 Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro Met Ala Ser Ser 170

 Val Pro Leu Val Pro

<210> 199 <211> 79 <212> PRT <213> Homo sapiens

180

Trp Pro Glu Ala Ala Leu Ser Ala Ser Leu Phe Leu Thr Pro Asn

<210> 200 <211> 69 <212> PRT <213> Homo sapiens

 50 55 60

Leu Ile Gly Tyr Ile

<210> 201

<211> 271

<212> PRT <213> Homo sapiens

<400> 201

Met Thr Gln Gly Lys Leu Ser Val Ala Asn Lys Ala Pro Gly Thr Glu 1 15 Gly Gln Gln Gln Val His Gly Glu Lys Lys Glu Ala Pro Ala Val Pro 20 30 Ser Ala Pro Pro Ser Tyr Glu Glu Ala Thr Ser Gly Glu Gly Met Lys

35 40 45

Ala Gly Ala Phe Pro Pro Ala Pro Thr Ala Val Pro Leu His Pro Ser

Pro Thr Gly Asp His Glu Leu Phe Thr Thr Phe Ser Trp Asp Asp Gln 85 90 95

Lys Val Arg Arg Val Phe Val Arg Lys Val Tyr Thr Ile Leu Leu Ile

Gln Leu Leu Val Thr Leu Ala Val Val Ala Leu Phe Thr Phe Cys Asp

Pro Val Lys Asp Tyr Val Gln Ala Asn Pro Gly Trp Tyr Trp Ala Ser 130 140 Tyr Ala Val Phe Phe Ala Thr Tyr Leu Thr Leu Ala Cys Cys Ser Gly

145 150 155 160
Pro Arg Arg His Phe Pro Trp Glu Pro Asp Ser Pro Asp Arg Leu Tyr

Pro Val His Gly Leu Pro His Trp Asp Ala Val Gln Leu Leu Gln His 180 185

His Leu Arg Ala Ala Val Pro Gly His His Gly Pro Cys Leu Pro Leu 195 200 205 Ser His Arg Leu Gln Leu Pro Asp Gln Val Arg Leu His Leu Leu Pro

Gly Arg Ala Leu Arg Ala Ser His Asp Ser Phe Leu Gln Arg Thr His 225 230 235 240

Leu Cys Ser Thr Gly Ser Gly Cys Ile Tyr Ile Val Pro Gly Thr 260 $$ 265

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<210> 202
<211> 51
<212> PRT
<213> Homo sapiens
<400> 202
Met Lys Cys Thr Ala Val Phe Ala Pro Ser Ala Trp Pro Asn Thr Leu
Ser Leu Leu Val Ser Leu His Thr Val Met Cys Ile Asn Trp His Leu
Val Ser Ala Ser His Met His Ile Gly Arg Ile Val Ile Leu Glu Gly
                              40
Asp Gly Met
     50
<210> 203
<211> 71
<212> PRT
<213> Homo sapiens
<400> 203
Met Pro Asn Thr Phe His Thr Tyr Arg Pro Ile Leu Leu Leu Leu Leu Leu 15
Leu Pro Ser Ser Ser His Gln Asn Met Ile Val Ser Leu Pro Gln Asn
Met Tyr Phe Leu Ile Ala Val Ala Lys Arg Leu Cys Ala Glu Ser Leu
Ala Ser Asp Pro Ala Pro Cys Asn Leu Ser Ala Leu Gln Ala Lys Pro 50 60
Arg Pro Arg Leu Arg His Tyr
 <210> 204
 <211> 60
 <212> PRT
 <213> Homo sapiens
 <400> 204
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<210> 205 <211> 143 <212> PRT

<213> Homo sapiens

<210> 206

<211> 148 <212> PRT

<213> Homo sapiens

145

<210> 207 <211> 36 <212> PRT

<213> Homo sapiens

<400> 207

Met Trp Thr Cys Pro Gly Ile Ala Ala Leu Val Leu Met Ile Val Pro

Gly Cys Ser Leu Cys Pro Ala Gln Val Val His His Val Gly Gln Arg

Glu Ser Pro Ser 35

<210> 208 <211> 406

<212> PRT <213> Homo sapiens

<400> 208

Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala Ala

Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln Ser Lys Ser 20 25 30

Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala His Gly Leu 40 Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg Thr Arg Ser

Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly Ser Ala Cys

Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro Glu Ser Arg $90 \hspace{1cm} 95$ Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu Lys Ala Gln

Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln Gln Gln Arg

His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln Ser Gln Phe

Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala Lys Pro Ala

Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp Pro Ala His 170

Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln Pro Gln Gly

 Ser
 Pro 210
 Pro 210
 Pro 210
 Pro 210
 Pro 220
 Val 3
 Asp 230
 Cys 4sp 6sp 6sp 6sp 7sp 220
 Met Thr 220
 Asp 6sp 6sp 7sp 220
 Asp 6sp 6sp 7sp 220
 Asp 6sp 6sp 7sp 220
 Pro 220
 Asp 6sp 6sp 7sp 220
 Pro 240
 Asp 240
 Pro 240
 Pro 240
 Asp 240
 Pro 240

<210> 209

Ala Ala Glu Ala Ala Ser 405

<211> 91 <212> PRT

<213> Homo sapiens

<212> PRT <213> Homo sapiens <400> 212

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<210> 210
<211> 101
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 210
Met Leu Leu Phe Gly Leu Cys Trp Gly Pro Tyr Val Ala Thr Leu Leu
1 10 15
Leu Ser Val Leu Ala Tyr Xaa Gln Arg Pro Pro Leu Xaa Pro Gly Thr
Leu Leu Ser Leu Leu Ser Leu Gly Ser Ala Ser Ala Ala Ala Val Pro
Val Ala Met Gly Leu Gly Asp Gln Arg Tyr Thr Ala Pro Trp Arg Ala 50 55 60
Ala Ala Gln Arg Cys Leu Gln Gly Leu Trp Gly Arg Ala Ser Arg Asp
Ser Pro Gly Pro Ser Ile Ala Tyr His Pro Ser Ser Gln Ser Ser Val
Asp Leu Asp Leu Asn
             100
<210> 211
<211> 50
<212> PRT
<213> Homo sapiens
<400> 211
Met Ser Ala Gly Lys Trp Leu Leu Leu Val Ile Phe Arg Asp Leu Gly
Cys Gly Val Ser Arg Thr Ser Pro His Leu Arg Ser Gly Glu Glu Gly
Arg Ile Trp Ser Leu Leu Thr Ala Cys Ser Cys Cys Cys Leu Phe Val
                               40
 Ile Phe
      50
 <210> 212
 <211> 161
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 Met
 Thr
 Ser
 Ala
 Leu
 Arg
 Gly
 Val
 Ala
 Asp
 Asp
 Gln
 Gly
 Gln
 His
 Pro

 Leu
 Leu
 Leu
 Leu
 His
 Leu
 Leu
 Ala
 Phe
 Ser
 Ser
 Ala
 Ala
 Thr

 Gly
 His
 Leu
 Leu
 Leu
 Leu
 Leu
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 Val
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 Leu
 Leu
 Val
 Leu
 Val
 Leu
 Leu
 Leu
 Val
 Leu
 Pro
 Leu
 Leu
 Leu
 Pro
 Leu
 Pro
 Glu
 Thr
 Pro
 Leu
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 Ala
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 Leu
 Leu

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<210> 213
<211> 227
<212> PRT
<213> Homo sapiens
<220>
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 213
Met Leu Gly Leu Leu Leu Cys Thr Pro Arg Ala Trp Leu Thr Leu
Ser Gly Pro Val Cys Phe Gln Gly Arg Gly Pro Ser Glu Val Pro Gln 20 25 30
Arg Pro Pro Gln Leu Trp Val Val Ser Ile Ser Val Leu Gln Gly Gln
His Arg Gly Arg Ala Gly Pro Arg Asp Glu Gln Glu Arg Gly Arg Asp
Gln His Xaa Leu Pro Ala His Gly Arg Leu His Leu Ser Pro Arg Pro
```

Glu Pro Gly Cys Arg Pro Ala Cys Ala Ala Pro Gly Gly Gln Pro Gly 85 90 95 Val Val Ser Gly Leu Pro Ala Leu Gly Gln Pro Arg Glu Ala Ser Ala

Pro Cys His Ile Ser Arg Leu Arg Thr Ala Ser Leu Ala Val Val Met

Gly Ala Glu Lys Gly Gly Ala Glu Met Arg Pro Trp Pro Ala Val Gln
130 140

Ala Pro Ala Pro Leu Pro Ser Val Gly Gly Thr Pro Ile Cys Ala Pro

Gly Cys Gly Ser Lys Asp Thr Val Pro Xaa Leu Gln Pro Ser Val Pro 165 170 175 Lys Gly Arg Ala Glu Ser Gly Phe Val Ser Ala Arg Phe Leu Cys Pro

His Pro Pro Arg Ser Leu Leu Cys Leu Gly Pro Gly Pro Ser Leu Ser

Gly Leu Pro Gly Pro Pro Ile Pro Ala Leu Leu Gln Gly Pro Leu Gly

Leu Gly Cys 225

<210> 214 <211> 351

<212> PRT <213> Homo sapiens

 $\begin{array}{c} (400) < 214 \\ \text{Met Leu Thr} \\ \text{Leu Arg} \\ \text{Ser Leu Leu Phe Trp} \\ \text{Ser Leu Val} \\ \text{Tyr} \\ \text{Cys} \\ \text{Gly} \\ \text{Leu Cys} \\ \text{Ala} \\ \text{Ser Ile His Leu Leu Lys Leu Leu Trp} \\ \text{Ser Leu } \\ \text{Ser Leu Cys} \\ \text{Ser Leu Cys} \\ \text{Ala} \\ \text{Ser Ile His Leu Leu Lys Leu Leu Trp} \\ \text{Ser Leu Cys} \\ \text{Ser Leu Leu Trp} \\ \text{Ser Leu Cys} \\ \text{Ser Leu Cys} \\ \text{Ser Pro Ala Arg Cys Leu Cys} \\ \text{Ser Asp Pro Ala Cys} \\ \text{Ser Asp Pro Ala Cys} \\ \text{Ser Cys} \\ \text{Leu Ser Asp Pro Ser Leu Cys} \\ \text{Ser His Cys} \\ \text{Ser Cys} \\ \text$

Asp Ser Leu Gly Tyr Ser Lys Cys Val Leu Ile Gly His Asp Trp Gly

150

155

145

<221> SITE <222> (84)

Gly Met Ile Ala Trp Leu Ile Ala Ile Cys Tyr Pro Glu Met Val Met Lys Leu Ile Val Ile Asn Phe Pro His Pro Asn Val Phe Thr Glu Tyr Ile Leu Arg His Pro Ala Gln Leu Leu Lys Ser Ser Tyr Tyr Tyr Phe 195 200 205 Phe Gln Ile Pro Trp Phe Pro Glu Phe Met Phe Ser Ile Asn Asp Phe Lys Val Leu Lys His Leu Phe Thr Ser His Ser Thr Gly Ile Gly Arg Lys Gly Cys Gln Leu Thr Thr Glu Asp Leu Glu Ala Tyr Ile Tyr Val245 250 250 Leu Glu Ala Tyr Ile Tyr Val Phe Ser Gln Pro Gly Ala Leu Ser Gly Pro Ile Asn His Tyr Arg Asn Ile Phe Ser Cys Leu Pro Leu Lys His His Met Val Thr Thr Pro Thr Leu Leu Leu Trp Gly Glu Asn Asp Ala Phe Met Glu Val Glu Met Ala Glu Val Thr Lys Ile Tyr Val Lys Asn Tyr Phe Arg Leu Thr Ile Leu Ser Glu Ala Ser His Trp Leu Gln Gln Asp Gln Pro Asp Ile Val Asn Lys Leu Ile Trp Thr Phe Leu Lys Glu Glu Thr Arg Lys Lys Asp <210> 215 <211> 93 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids <400> 215 Met Gly His Leu Pro His Ile Leu Ser Leu Gly Leu Phe Leu Thr Leu 1 15 Leu Met Phe Cys Ile Thr Lys Ser Asp Gly Gln Asn Lys Ile Tyr Arg 20 30 30

Cys Phe Lys Lys Ala Ser Pro Gln Val Ile Val Thr His Thr Lys Met Arg Ile Ala Ala Ile Ile Cys Ser Tyr Trp Xaa Gly Xaa Ala Asn Leu 50 60Gly Thr Arg Ile Lys Leu Gln Leu Asn Ser Ala Val Tyr Lys Ile Phe $_{65}^{\rm C}$ Val Ser Leu Xaa Arg Lys Arg Lys Arg Thr Leu Ser Trp

<210> 216 <211> 101 <212> PRT <213> Homo sapiens

<400> 216 Met Phe Gln Gln Gly Trp Ser Ser Pro Leu Leu Thr Pro Ala Phe Thr Ile Leu Pro Met Ser Ser Leu Leu Thr Ser Leu His Pro Ala Pro Arg Leu Pro Thr Leu Leu Ala Ala Ser Ser Pro Gln Leu Ala Pro Leu Thr Cys Cys Phe Gln Tyr Pro Phe Leu Leu Ser Ala Ser Ser Leu Gly Asp

Ile His Pro Ser Ser Arg Asp Phe Ser Cys His Ile Asn Ser Asn Val Ser Glu Leu Tyr Phe Leu Pro Pro Thr Ser Val Ser Leu Asn Val Arg $90 \hspace{0.5cm} 95$ Ile Phe Tyr Phe Gln

<210> 217 <211> 98 <212> PRT <213> Homo sapiens

<400> 217 Met Gly Trp Leu Gly Arg Thr Cys Leu Ala His Ser His Leu Asp Phe Ile Ser Gly Ala Leu Leu Leu Thr Phe Ala Tyr Phe Leu Val Phe Gln 20 25 30Val Cys Pro Val Ile Asn Lys Trp Leu Tyr Asn Leu Asp Gln His Val Val Lys Glu Leu Ile Ser Lys Cys Trp Arg Trp Glu Gly Thr Gly Thr Leu Gln Lys Lys Ala Gln Asn Pro Pro Ser Pro Phe Val Phe His Phe 65 70 75 80 Pro Leu Pro His Ser Gly Thr Ser Pro Arg Pro Lys Ile Ser Phe Leu 85 90 95

Leu Lys

<210> 218

<211> 81 <212> PRT

<213> Homo sapiens

<400> 218

Met Trp Gly Gly Ser Val Phe Leu Lys Pro Lys Leu Leu Gln Ala Gly
1 5 10 15

Gly Phe Leu His Phe Leu Phe Val Leu Phe Leu Thr Ala Asp Ser Val $20 \ 25 \ 30$

His Leu Ser Val Gly Gly Glu Leu Leu Leu Arg Thr Gly Phe Lys Arg 35 40

His Ile Pro Val Thr Phe Lys Asn Leu His Gly Gly Arg Ser Phe Ser 50 60

Arg Ser Val Gly Trp Ser Thr Leu Gly Pro Thr Thr Leu Arg Arg Gly 65 70 80

<210> 219

<211> 188

<211> 188

<213> Homo sapiens

Leu Asn Ser Ile Tyr Gln Cys Pro Glu His Ser Gln Leu Thr Thr Leu $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Gly Val Asp Gly Lys Glu Phe Pro Glu Val His Leu Gly Gln Trp Tyr 35 40 45 . . .

Phe Ile Ala Gly Ala Ala Pro Thr Lys Glu Glu Leu Ala Thr Phe Asp $50 \hspace{1cm} 55$

Pro Val Asp Asn Ile Val Phe Asn Met Ala Ala Gly Ser Ala Pro Met 65 70 70 75 80

Gln Leu His Leu Arg Ala Thr Ile Arg Met Lys Asp Gly Leu Cys Val $_{85}^{0}$ Pro Arg Lys Trp Ile Tyr His Leu Thr Glu Gly Ser Thr Asp Leu Arg $_{100}^{100}$

Thr Glu Gly Arg Pro Asp Met Lys Thr Glu Leu Phe Ser Ser Ser Cys 115 120 125

Pro Gly Gly Ile Met Leu Asn Glu Thr Gly Gln Gly Tyr Gln Arg Phe

Leu Leu Tyr Asn Arg Ser Pro His Pro Pro Glu Lys Cys Val Glu Glu

Phe Lys Ser Leu Thr Ser Cys Leu Asp Ser Lys Ala Phe Leu Leu Thr

Pro Arg Asn Gln Glu Ala Cys Glu Leu Ser Asn Asn

<210> 220

<211> 44 <212> PRT

<213> Homo sapiens

<400> 220

Met Gln Arg Thr Phe Lys Tyr Leu His Phe Tyr Ile Ile Arg Phe Val

Ser Thr Tyr Ala Phe Ile Val Phe Phe Pro Phe Ser Ser Ser His Val $20 \hspace{0.25cm} 25 \hspace{0.25cm} 30$

Asn Gly Pro Cys Glu Lys Asn Ile Pro Leu Gly Lys

<210> 221

<211> 515 <212> PRT

<213> Homo sapiens

<400> 221

Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu Arg Gly Leu Gln Ala Gly Gly Glu Trp Arg Arg Pro Pro Ala His Ser 20 25 30

Pro Val Pro Ala Pro Pro Leu Arg Phe Ala Ser Pro His Ser Pro Gln

Ala Pro Asp Pro Gly Phe Gln Glu Arg Phe Phe Gln Gln Arg Leu Asp

His Phe Asn Phe Glu Arg Phe Gly Asn Lys Thr Phe Pro Gln Arg Phe 65 70 75 80

Leu Val Ser Asp Arg Phe Trp Val Arg Gly Glu Gly Pro Ile Phe Phe

Tyr Thr Gly Asn Glu Gly Asp Val Trp Ala Phe Ala Asn Asn Ser Gly

Phe Val Ala Glu Leu Ala Ala Glu Arg Gly Ala Leu Leu Val Phe Ala

Glu His Arg Tyr Tyr Gly Lys Ser Leu Pro Phe Gly Ala Gln Ser Thr

Gln Arg Gly His Thr Glu Leu Leu Thr Val Glu Gln Ala Leu Ala Asp

Phe Ala Glu Leu Leu Arg Ala Leu Arg Arg Asp Leu Gly Ala Gln Asp

515

Ala Pro Ala Ile Ala Phe Gly Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro His Leu Val Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ala Val Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr Gln Leu Phe Met Phe Ala Arg Asn Ala 280 Phe Thr Val Leu Ala Met Met Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu His Cys Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys Thr Glu Ile Asn Leu Thr Phe Ala Ser 370 375 380Asn Asn Val Thr Asp Met Phe Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp Thr Trp Gly Val Trp Pro Arg Pro Asp Trp Leu Leu Thr Ser Phe Trp Gly Gly Asp Leu Arg Ala Ala Ser Asn Ile Ile Phe Ser Asn Gly Asn Leu Asp Pro Trp Ala Gly Gly Gly Ile Arg Arg Asn Leu Ser Ala Ser Val Ile Ala Val Thr Ile Gln Gly Gly Ala His His Leu Asp Leu Arg Ala Ser His Pro Glu Asp Pro Ala Ser Val Val Glu Ala Arg Lys Leu Glu Ala Thr Ile Ile Gly Glu Trp Val 490 Lys Ala Ala Arg Arg Glu Gln Gln Pro Ala Leu Arg Gly Gly Pro Arg 505 Leu Ser Leu

<210> 222 <211> 522 <212> PRT <213> Homo sapiens <400> 222 Met Ala Ala Ala Met Pro Leu Ala Leu Leu Val Leu Leu Leu Gly Pro Gly Gly Trp Cys Leu Ala Glu Pro Pro Arg Asp Ser Leu Arg Glu $20 \ \ 25 \ \ 30$ Glu Leu Val Ile Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln Phe Arg Thr Arg Trp Asp Ser Glu Leu Gln Arg Glu Gly Val Ser His Tyr Arg Leu Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu Leu His Leu Ser Phe Thr Gln Gly Phe Trp Arg Thr Arg Tyr Trp Gly Pro Pro Phe Leu Gln Ala Pro Ser Asp Thr Asp His Tyr Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val Val Cys Thr Glu Asn Leu Thr Pro Trp Lys Lys Leu Leu Pro Cys Ser Ser Lys Ala Gly 130 135 Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg Asn Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val Val Phe Asp Ala Phe Ile Thr Gly Gln Gly Lys Lys Asp Trp Ser Leu Phe Arg Met Phe 195 200 205 Ser Arg Thr Leu Thr Glu Pro Cys Pro Leu Ala Ser Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr Asn Gln Asp Asn Glu Thr Leu Glu Val 225 His Pro Pro Pro Thr Thr Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile Tyr Asp Leu Leu Asp Thr Ala Met Ile Asn Asn Ser Arg Asn Leu Asn Ile Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn $275 \hspace{1cm} 280 \hspace{1cm} 285 \hspace{1cm}$

Glu Ala Pro Pro Val Pro Phe Leu His Ala Gln Arg Tyr Val Ser Gly

465 470 475 480

Ala Val Cys Tyr Gly Ser Phe Tyr Asn Leu Leu Thr Arg Thr Phe His
485

Ile Glu Glu Pro Arg Thr Gly Gly Leu Ala Lys Arg Leu Ala Asn Leu
500 500 510

Ile Arg Arg Ala Arg Gly Val Pro Pro Leu

<210> 223 <211> 52

<212> PRT

<213> Homo sapiens

<210> 224 <211> 73

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Gly Phe Trp Cys Gly Cys Pro Phe Cys Leu Leu Val Phe Leu Leu
1 10 15
Thr Val Arg Thr Arg Ser Phe Xaa Ser Val Gly Val Cys Trp Arg Ser
Thr Pro Asp Pro Leu Cys Leu Gly Ile Ser Ser Arg Ser Cys Arg Thr
Ala Asp Ile Gly Glu Gln Gln Met Leu Leu Pro Asp Arg Ser Ser Gly 50 55 60
Ser Phe Val Ser Glu Tyr Pro Ala Met
<210> 225
<211> 54
<212> PRT
<213> Homo sapiens
<400> 225
Met Tyr Arg Phe Phe Leu Cys Val Asp Leu Ser Phe Gln Leu Leu Trp
Val Ile Pro Arg Ser Thr Val Thr Gly Thr Tyr Gly Lys Asp Ile Phe
Ser Leu Ala Gly Asn His His Thr Val Phe Gln Ser Ser Cys Thr Ile
Leu His Thr His Gln His
     50
<210> 226
<211> 72
<212> PRT
<213> Homo sapiens
<400> 226
Met Ala Thr Ile Leu Leu Lys Leu Pro Ile Leu Ser Ala Met Ile Lys
1 5 10 15
Lys Pro Leu Arg Asn Tyr Leu Lys Thr Ser Glu Thr Thr Met Glu Lys
Ile Ile Ile Gln Lys Leu Val Ala Asn Leu Lys Phe Leu Pro Leu Gly
Thr Leu Gln Leu Ala Met Met Ile Ala Asn Leu Ile Lys Lys Leu Phe
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Phe Pro Leu Val Lys Ala Ala Lys

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<210> 227
<211> 66
<212> PRT
<213> Homo sapiens
<400> 227
Met Tyr Leu Ala Val Tyr Leu Leu Leu Phe Leu Cys Ile Cys Phe Tyr
Phe Ile Ala Leu Phe Ser His Ala Leu Val Pro His Cys Phe Asn Tyr
Pro Gly Phe Ser Phe Asn Leu Val His Trp Ser Ser Leu Ile Pro Pro
Leu Pro Thr Phe Phe Phe Asn Ser Phe Ser Asn Cys Ser Tyr Phe
Ser Ile
65
<210> 228
<211> 56
<212> PRT
<213> Homo sapiens
<400> 228
Met Ala Lys Thr Asp Phe Ser Ile Ile Leu Leu Lys Leu His Cys Leu
Phe Phe Phe Ser Val Ile Ser Val His Cys Ala Gln Ser Phe Ile Ser 20 25 30
Val Thr Gln Thr Glu Pro Ser Pro Ala Val Cys Ile Phe Pro Ala Val
 Gly Ser Gly Leu Gly Pro Cys Asp
      50
 <210> 229
 <211> 76
 <212> PRT
 <213> Homo sapiens
 <400> 229
 Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala Ala 1 10 15
 Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile Leu Gly
 Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His Asn
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Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser Ala Met Arg Glu

Lys Pro Ala Gly Ala Ser Leu Cys Trp Ala Ala Trp
65 70 75

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<210> 230
<211> 44
<212> PRT
<213> Homo sapiens
<400> 230
Met Asp Leu Tyr Phe Phe Leu Leu Ala Gly Ile Gln Ala Val Thr Ala
Leu Leu Phe Val Trp Ile Ala Gly Arg Tyr Glu Arg Ala Ser Gln Gly
Pro Ala Ser His Ser Arg Phe Ser Arg Asp Arg Gly
<210> 231
<211> 101
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Ser Trp Val Gln Ala Thr Leu Leu Ala Arg Gly Leu Cys Arg Ala
Trp Gly Gly Thr Cys Gly Ala Ala Leu Thr Gly Thr Ser Ile Ser Gln
Val Pro Arg Arg Leu Pro Arg Gly Leu His Cys Ser Ala Leu Xaa Ile
Ala Leu Asn Ser Pro Trp Phe Pro Ala His Arg Asn Pro Gly Arg Gly
 Pro Pro Arg Leu Trp Cys Pro Leu Arg Thr Cys Leu Gly Arg Arg Leu 65 70 75 80
 Val Gly Asn Gly Thr Arg Arg Ala Ser Cys Arg Arg Cys Arg Asn Leu
 Arg Xaa Gln Arg Ala
             100
 <210> 232
 <211> 132
 <212> PRT
 <213> Homo sapiens
 <400> 232
 Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala Trp
```

10 Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala Val 20 25Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala Met Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Ala Phe Val Tyr Gly Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu Ala Val Met 65 70 75 80Ala Ile Gln Ser Leu His Pro Cys Pro Ser Glu Leu Cys Cys Arg Ala Cys Val Ser Phe Tyr His Trp Ala Met Val Ala Val Thr Gly Gly Val Gly Val Ala Ala Ala Leu Cys Leu Cys Ser Leu Leu Leu Trp Pro Thr Arg Leu Arg Arg 130 <210> 233 <211> 66 <212> PRT <213> Homo sapiens <400> 233 Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala Trp Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala Val 20 25 30Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala Met Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Leu Ser Cys Thr Ala Pro 65 <210> 234 <211> 72 <212> PRT <213> Homo sapiens <400> 234 Met Pro Trp Lys Arg Ala Val Val Leu Leu Met Leu Trp Phe Ile Gly Gln Ala Met Trp Leu Ala Pro Ala Tyr Val Leu Glu Phe Gln Gly Lys $20 \hspace{0.5cm} 25 \hspace{0.5cm} 30$ Asn Thr Phe Leu Phe Ile Trp Leu Ala Gly Leu Phe Phe Leu Leu Ile 35 45 Asn Cys Ser Ile Leu Ile Gln Ile Ile Ser His Tyr Lys Glu Glu Pro 50 60

Leu Thr Glu Arg Ile Lys Tyr Asp

<210> 235

<211> 293 <212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 235

Met Leu Ala Leu Thr Phe Met Phe Met Val Leu Glu Val Val Ser

Arg Val Thr Ser Ser Leu Ala Met Leu Ser Asp Ser Phe His Met Leu

Ser Asp Val Leu Ala Leu Val Val Ala Leu Val Ala Glu Arg Phe Ala Arg Arg Thr His Ala Thr Gln Lys Asn Thr Phe Gly Trp Ile Arg Ala

Glu Val Met Gly Ala Leu Val Asn Ala Ile Phe Leu Thr Gly Leu Cys

Phe Ala Ile Leu Leu Glu Ala Ile Glu Arg Phe Ile Glu Pro His Glu

Met Gln Gln Pro Leu Val Val Leu Gly Val Gly Val Ala Gly Leu Leu Val Asn Val Leu Gly Leu Cys Leu Phe His His His Ser Gly Phe Ser

120

Gln Asp Ser Gly His Xaa His Ser His Gly Gly His Gly His Gly His

Gly Leu Pro Lys Gly Pro Arg Val Lys Ser Thr Arg Pro Gly Ser Ser

Asp Ile Asn Val Ala Pro Gly Glu Gln Gly Pro Asp Gln Glu Glu Thr Asn Thr Leu Val Ala Asn Thr Ser Asn Ser Asn Gly Leu Lys Leu Asp

Pro Ala Asp Pro Glu Asn Pro Arg Ser Gly Asp Thr Val Glu Val Gln

Val Asn Gly Asn Leu Val Arg Glu Pro Asp His Met Glu Leu Glu Glu 210 220

Asp Arg Ala Gly Gln Leu Asn Met Arg Gly Val Phe Leu His Val Leu

Gly Asp Ala Leu Gly Ser Val Ile Val Val Val Asn Ala Leu Val Phe 245 $$ 250 $$ 255

Tyr Phe Ser Trp Lys Gly Cys Ser Glu Gly Asp Phe Cys Val Asn Pro 260 270 270 270 270 Cys Phe Pro Asp Pro Cys Lys Ala Phe Val Glu Ile Leu Ile Val Leu 275 280 Met His Gln Phe Met 290

<210> 236 <211> 550 <212> PRT <213> Homo sapiens <400> 236 Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu 50 60His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly 115 120 125 Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser

Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn

Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp

Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys

Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro

Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Ser

Pro Pro Gly Asn Gly Phe Trp Pro Lys Gly Thr Leu Met Thr Tyr Pro

Phe Gly Thr Leu Pro Gly Leu Ala Glu Pro Pro Val Ser Ala Leu Arg Pro Glu Gly Ser Glu Pro Pro Gly Ser Pro Leu Arg Ala Leu Arg Arg

Arg Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Ala Val Trp 420 $$ 425 $$ 430 $$

Ala Arg Gln Ala Ala Gly Val Ala Gly Leu Val Thr Gln Lys Ala Gln

Val Pro Tyr Pro Ala Ser Pro Ala Ala Ser Pro Pro Trp Ala Trp Arg

Trp Cys Cys Gly Gln Cys Leu Gly Pro Ala Asp Pro Gln Arg Thr Gln

Glu Arg Ala Gln Gln Pro Gly Val Cys Thr Tyr Gly Val Ser Leu His

Ala Ala Lys Pro Ala Gly Arg Pro Thr Arg Gly Ala Gly Gln Ala Arg Ser Ser Leu Met Asp Ala Cys Arg Pro Pro Pro Pro Ser Pro Pro His 520

His Val Tyr Arg Val Arg Arg Gln Arg Leu Phe Gln Asn Ala Ala Ser 535

His Pro Asp Arg Gly Ile

<210> 237

<211> 380 <212> PRT

<213> Homo sapiens

<400> 237

Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu

10 Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val 20 25 30Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu 35 40 45 Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu $50 \hspace{0.1in} 60$ His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile 85 90 95 Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu 100 105 110Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly 115 120 125Leu Gly Arg Leu His Thr Val His Leu Asp Arg Cys Gly Leu Gln Glu $130 \hspace{1.5cm} 135 \hspace{1.5cm} 140 \hspace{1.5cm}$ Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr 145 150 155 160 Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp 165 170 175 Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser 180 185 190Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala 225 230 235 240Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg 245 250 250 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp $260 \hspace{1.5cm} 265 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$ Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser 275 280 285 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp 305 310 315 Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys 325 330 335 Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro 340 345 350Ala Ser Ala Gly Asn Ala Leu Lys Gly Pro Arg Ala Gly Arg Gly Gln

365 360 355

Ala Arg Arg Glu Thr Val Phe Gly Pro Arg Glu His

<210> 238

<211> 54 <212> PRT

<213> Homo sapiens

<400> 238

Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys 10

Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly

Arg Arg Arg Lys Asn Ser Phe Leu Phe Leu Leu Ser Phe Ser Ile Glu

Phe Leu Leu Cys Val Trp 50

<210> 239

<211> 47

<212> PRT <213> Homo sapiens

<400> 239

Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly

Lys Glu Lys Lys Leu Leu Phe Ile Phe Thr Phe Phe Gln His

<210> 240

<211> 53 <212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 240

Met Cys Lys Ala Val Cys Lys His Arg Leu Arg Leu Phe Ala Val Ser

Ser Phe Ser Leu Gly Leu Gly Trp Val Cys Val Leu Val Leu Met Leu

Trp Pro Val Arg Leu Ser Leu Ala Xaa Arg Pro Val Gln Leu Gln Gln

Arg Arg Ser His Cys

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<210> 241
<211> 69
<212> PRT
<213> Homo sapiens
<400> 241
Met Ser Arg Lys Ser Leu Ala Phe Pro Ile Ile Cys Ser Tyr Leu Cys
Phe Leu Thr Val Ala Thr Cys Ser Ile Ala Cys Thr Thr Val Phe Phe
Ala Asn Leu Arg His Thr Arg Tyr Ile Cys Ile Glu Leu Ser Ala Leu
Glu Thr Ser Gly Val Ile Ser Pro Gln Ile Asn Asn Val Pro Glu Val
His Gly Lys Tyr Ser
<210> 242
<211> 68
<212> PRT
<213> Homo sapiens
<400> 242
Met Lys Pro Thr Arg Ser Leu Trp Ile Ser Phe Leu Met Cys Cys Trp
Ile Trp Phe Ala Asn Ile Leu Leu Arg Ile Phe Ala Ser Val Phe Phe 20 \\ 25 \\ 30
Arg Asp Ile Gly Leu Lys Phe Ser Phe Phe Cys Cys Val Ser Ala Arg
Leu Trp Tyr Gln Asp Asp Ala Gly Leu Ile Asn Glu Leu Gly Arg Ile
Pro Ser Phe Tyr
<210> 243
<211> 67
<212> PRT
<213> Homo sapiens
<400> 243
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
```

Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Thr Cys 50 55 60 Phe Gly Ala

<210> 245 <211> 140 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (117) <223> Xaa equals any of the naturally occurring L-amino acids Met Ala Phe Lys Leu Leu Ile Leu Leu Ile Gly Thr Trp Ala Leu Phe Phe Arg Lys Arg Arg Ala Asp Met Pro Arg Val Phe Val Phe Arg Ala Leu Leu Leu Val Leu Ile Phe Leu Phe Cys Gly Phe Pro Ile Gly Phe Phe Thr Gly Ser Ala Phe Trp Thr Leu Gly Asn Arg Asn Tyr Gln Gly Ile Val Gln Tyr Ala Val Ser Pro Cys Gly Met Pro Ser Ser Phe His Pro Leu Leu Ala Ile Arg Pro Cys Trp Ser Ser Gly Ser Leu Gln Pro Asn Val Pro Arg Cys Arg Leu Val Pro Leu Pro Thr Glu Trp Gly Asn Pro Arg Phe Gln Xaa Gly Thr Pro Glu Tyr Pro Ala Ser Ser Ile Gly

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Gly Pro Arg Lys Leu Leu Gln Arg Phe His His Leu
                       135
<210> 246
<211> 37
<212> PRT
<213> Homo sapiens
<400> 246
Met Gly Leu Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly
Ser Pro Arg Thr Leu
        35
<210> 247
<211> 20
<212> PRT
<213> Homo sapiens
<400> 247
Arg Leu Leu Asn Leu Ser Val Pro Met Phe Thr Phe Ile Val Val Lys
Arg Tyr Ala Thr
<210> 248
<211> 138
<212> PRT
<213> Homo sapiens
<400> 248
Met Ala Tyr Leu Thr Gly Met Leu Ser Ser Tyr Tyr Asn Thr Thr Ser
Val Leu Leu Cys Leu Gly Ile Thr Ala Leu Val Cys Leu Ser Val Thr
Val Phe Ser Phe Gln Thr Lys Phe Asp Phe Thr Ser Cys Gln Gly Val
 Leu Phe Val Leu Leu Met Thr Leu Phe Phe Ser Gly Leu Ile Leu Ala
 Ile Leu Leu Pro Phe Gln Tyr Val Pro Trp Leu His Ala Val Tyr Ala 65 70 75 80
 Ala Leu Gly Ala Gly Val Phe Thr Leu Phe Leu Ala Leu Asp Thr Gln
 Leu Leu Met Gly Asn Arg Arg His Ser Leu Ser Pro Glu Glu Tyr Ile
 Phe Gly Ala Leu Asn Ile Tyr Leu Asp Ile Ile Tyr Ile Phe Thr Phe 115 120 125
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Phe Leu Gln Leu Phe Gly Thr Asn Arg Glu 130 135

<210> 249 <211> 175 <212> PRT

<213> Homo sapiens

<400> 249

Met Ala Gln Trp Thr Ser Thr Gly Pro Gly Lys Pro Thr Arg Arg Gly
1 10 15

Leu Gly Ile Pro Thr Ala Ser Ser Gly Trp Val Trp Arg Arg Cys Ile $20 \\ 20 \\ 25$

Ala Ser Trp Gly Thr Ala Thr Ala Ala Trp Pro Cys Ser Cys Gly Thr 35 40 40 45

Gly Met Ala Thr Pro Ser Cys Cys Ser Ser Pro Cys Thr Trp Val Ala $_{50}^{60}$ Arg Thr Arg Pro Ile Ala Cys Ser Ser Leu His Pro Trp Pro Ala Ser $_{65}^{65}$ 70 80

Trp Ala Pro Pro Pro Ser His Pro Ala Ala Ser Pro Tyr Pro Ser Pro

Leu Gly Thr Arg Ile Thr Thr Ser Ala Gly Thr Arg Thr Ala Pro Arg $100 \\ 0.05$

Ala Ser Leu Glu Ala Gly Gly Leu Ala Pro Ala Ala Ile Pro Thr Phe 115 Asn Gly Pro Val Leu Pro Ala Pro Ser His Ser Ser Gly Arg Ser Leu 130 135 140

Arg Arg Glu Ser Ser Gly Arg Pro Ala Gly Arg Tyr Tyr Pro Leu Gln

Ala Thr Thr Met Leu Ile Gln Pro Met Ala Ala Glu Ala Ala Ser

<210> 250

<211> 101 <212> PRT

<213> Homo sapiens

<400> 250

Met Leu Leu Phe Gly Leu Cys Trp Gly Pro Tyr Val Ala Thr Leu Leu 1 15 Leu Ser Val Leu Ala Tyr Glu Gln Arg Pro Pro Leu Gly Pro Gly Thr

20 25 30

Ala Ala Gln Arg Cys Leu Gln Gly Leu Trp Gly Arg Ala Ser Arg Asp

70 75 65 Ser Pro Gly Pro Ser Ile Ala Tyr His Pro Ser Ser Gln Ser Ser Val Asp Leu Asp Leu Asn 100 <210> 251 <211> 39 <212> PRT <213> Homo sapiens <400> 251 Met Leu Gly Leu Leu Leu Cys Thr Pro Arg Ala Trp Leu Thr Leu Ser Gly Pro Val Cys Phe Gln Gly Arg Asp Pro Leu Arg Ser His Arg Gly His Pro Ser Cys Gly Ser 35 <210> 252 <211> 47 <212> PRT <213> Homo sapiens <400> 252 Met Leu Ser Ile Ile Pro Asn Asp Arg Leu Phe Ile Asn Leu Ile Phe Leu Ser Asn Phe Leu Pro Ser Val Leu Trp Glu Pro Ala Gly Gln Met Trp Tyr Thr His Val Arg Tyr Pro Ser Gly Arg Leu Leu Ser Leu <210> 253 <211> 34 <212> PRT <213> Homo sapiens <400> 253 Met Thr Gly Phe Ala Gln Phe Cys Val Ile Leu Gly Leu Asn Leu Ser Leu Phe Gly Thr Phe Pro Tyr Leu Leu Pro Ser Ser Glu Ser Arg Cys $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ Arg Lys

<211> 490 <212> PRT <213> Homo sapiens

<210> 254

<400> 254 Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Ala Leu Gly Leu Arg Gly Leu Gln Ala Gly Ala Arg Ser Gly Pro Arg Leu Pro Gly Ala Leu Leu Pro Ala Ala Ser Gly Pro Leu Gln Leu Arg Ala Leu Arg Gln Gln Asp Leu Pro Ser Ala Leu Pro Gly Val Gly Gln Val Leu Gly Pro Gly Arg Gly Ala His Leu Leu His Trp Glu Arg Gly Arg Arg Val Gly Leu Arg Gln Gln Leu Gly Leu Arg Arg Gly Leu Ala Ala Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly His Thr Glu Leu Leu Thr 115 120 125Val Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu Leu Arg Ala Leu Arg Arg Asp Leu Gly Ala Gln Asp Ala Pro Ala Ile Ala Phe Gly Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro His Leu Val Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ser Val Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr Gln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu His Cys 305 Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys Thr Glu 340 345 350 Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe Pro Asp 355 360

Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp Thr Trp 370 380

Gly Val Trp Pro Arg Pro Asp Trp Leu Leu Thr Ser Phe Trp Gly Gly 385 \$390\$

Asp Leu Arg Ala Ala Ser Asn Ile Ile Phe Ser Asn Gly Asn Leu Asp 405 410

Pro Trp Ala Gly Gly Gly Ile Arg Arg Asn Leu Ser Ala Ser Val Ile
420
425
Ala Val Thr Ile Gln Gly Gly Ala His His Leu Asp Leu Arg Ala Ser

His Pro Glu Asp Pro Ala Ser Val Val Glu Ala Arg Lys Leu Glu Ala 450 450

Thr Ile Ile Gly Glu Trp Val Lys Ala Ala Arg Arg Glu Gln Gln Pro 465 470 470 475

Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu 485 490

<210> 255

<211> 554 <212> PRT

<213> Homo sapiens

<400> 255 Gly Gly Gly Tyr Ala Leu Ala Leu Leu Val Leu Leu Leu Leu Gly Pro $\frac{1}{15}$

Gly Gly Trp Cys Leu Ala Glu Pro Pro Arg Asp Ser Leu Arg Glu Glu 20 25

Leu Val Ile Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln $\frac{35}{35}$ Phe Arg Trp Asp Ser Glu Leu Gln Arg Glu Gly Val Ser His $\frac{50}{60}$

Tyr Arg Leu Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser

Leu Arg Glu Leu His Leu Ser Phe Thr Gln Gly Phe Trp Arg Thr Arg

Tyr Trp Gly Pro Pro Phe Leu Gln Ala Pro Ser Asp Thr Asp His Tyr 100 105

Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val Val Cys Thr Glu Asn 115 120 125

Leu Thr Pro Trp Lys Lys Leu Leu Pro Cys Ser Ser Lys Ala Gly Leu 130 135 140

Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His Thr Ser Tyr His Ser 145 $$ 150 $$ 150 $$ 160

Gln Ala Val His Ile Arg Pro Val Cys Arg Asn Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val Val Phe Asp Ala Phe Ile Thr Gly Gln Gly Lys Lys Asp Trp Ser Leu Phe Arg Met Phe Ser Arg Thr Leu Thr Glu Pro Cys Pro Leu Ala Ser Glu Ser Arg Val Tyr 210 215 220 Val Asp Ile Thr Thr Tyr Asn Gln Asp Asn Glu Thr Leu Glu Val His Thr Tyr Ala Ile Tyr Asp Leu Leu Asp Thr Ala Met Ile Asn Asn Ser $260 \hspace{0.2in} 265 \hspace{0.2in} 270 \hspace{0.2in}$ Arg Asn Leu Asn Ile Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn Glu Ala Pro Pro Val Pro Phe Leu His Ala Gln Arg Tyr Val Ser Gly Tyr Gly Leu Gln Lys Gly Glu Leu Ser Thr Leu Leu Tyr Asn Thr His Pro Tyr Arg Ala Phe Pro Val Leu Leu Leu Asp Thr Val Pro Trp Tyr Leu Arg Leu Tyr Val His Thr Leu Thr Ile Thr Ser Lys Gly Lys Glu Asn Lys Pro Ser Tyr Ile His Tyr Gln Pro Ala Gln Asp Arg Leu Gln Pro $355 \hspace{0.5in} 360 \hspace{0.5in} 365$ His Leu Leu Glu Met Leu Ile Gln Leu Pro Ala Asn Ser Val Thr Lys 375 Val Ser Ile Gln Phe Glu Arg Ala Leu Leu Lys Trp Thr Glu Tyr Thr Pro Asp Pro Asn His Gly Phe Tyr Val Ser Pro Ser Val Leu Ser Ala Leu Val Pro Ser Met Val Ala Ala Lys Pro Val Asp Trp Glu Glu Ser 420 425 430 Pro Leu Phe Asn Ser Leu Phe Pro Val Ser Asp Gly Ser Asn Tyr Phe Val Arg Leu Tyr Thr Glu Pro Leu Leu Val Asn Leu Pro Thr Pro Asp Phe Ser Met Pro Tyr Asn Val Ile Cys Leu Thr Cys Thr Val Val Ala Val Cys Tyr Gly Ser Phe Tyr Asn Leu Leu Thr Arg Thr Phe Pro His Arg Gly Ala Pro His Arg Trp Pro Gly Gln Ala Ala Gly Gln Pro Tyr
500 505 510

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Pro Ala Arg Pro Ser Val Pro Pro Thr Leu Ile Leu Ala Leu Ser Ser
        515
Ser Cys Ser Cys Arg Phe Ser Leu Gly Arg Gly Ala Gln Gly Leu Phe
Leu Pro Leu Ala Leu Leu Arg Val Gly Phe
                    550
<210> 256
<211> 69
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 256
Met Tyr Leu Ala Val Tyr Leu Leu Leu Phe Leu Cys Ile Cys Phe Tyr
Phe Ile Ala Leu Phe Ser His Ala Leu Xaa Pro His Cys Phe Asn Tyr
Pro Gly Phe Ser Phe Asn Leu Val His Trp Ser Ser Leu Ile Pro Pro
Leu Pro Xaa Phe Phe Phe Phe Asn Ser Phe Ser Asn Cys Ser Leu Phe
Phe Pro Tyr Xaa Leu
<210> 257
 <211> 21
<212> PRT
 <213> Homo sapiens
 <400> 257
 Thr Arg Pro Glu Lys Val Gln Ala Pro Leu Lys Trp Phe Lys Phe Gln
 Ile Leu Asp Pro Pro
              20
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<210> 258 <211> 272 <212> PRT

<213> Homo sapiens <220> <221> SITE <222> (51) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (229) <223> Xaa equals any of the naturally occurring L-amino acids <400> 258 Ser Ala Glu Phe Gly Val Ala Pro Leu Pro Gly Arg Arg Gly Ser Pro Val Arg Gln Leu Ala Gln Phe Arg Arg Arg Leu Leu Arg Gly Ser Gly Gly Arg Gly Ala Pro Gly Arg Pro Pro Arg Cys Pro Gly Glu Ala Arg Val Met Xaa Pro Pro Ser Cys Ile Gln Asp Glu Pro Phe Pro His Pro Leu Glu Pro Glu Pro Gly Val Ser Ala Gln Pro Gly Pro Gly Lys Pro Ser Asp Lys Arg Phe Arg Leu Trp Tyr Val Gly Gly Ser Cys Leu Asp His Arg Thr Thr Leu Pro Met Leu Pro Trp Leu Met Ala Glu Ile Arg 105 Arg Arg Ser Gln Lys Pro Glu Ala Gly Gly Cys Gly Ala Pro Ala Ala Arg Glu Val Ile Leu Val Leu Ser Ala Pro Phe Leu Arg Cys Val Pro Ala Pro Gly Ala Gly Ala Ser Gly Gly Thr Ser Pro Ser Ala Thr Gln Pro Asn Pro Ala Val Phe Ile Phe Glu His Lys Ala Gln His Ile Ser Arg Phe Ile His Asn Ser His Asp Leu Thr Tyr Phe Ala Tyr Leu Ile Lys Ala Gln Pro Asp Asp Pro Glu Ser Gln Met Ala Cys His Val Phe 200 Arg Ala Thr Asp Pro Ser Gln Val Pro Asp Val Ile Ser Ser Ile Arg Gln Leu Ser Lys Xaa Ala Met Lys Glu Asp Ala Lys Pro Ser Lys Asp Asn Glu Asp Ala Phe Tyr Asn Ser Gln Lys Phe Glu Val Leu Tyr Cys Gly Lys Val Thr Val Thr Pro Gln Glu Gly Pro Leu Lys Pro His Arg

265

260

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<210> 259
<211> 14
<212> PRT
<213> Homo sapiens
<400> 259
Pro Met Leu Pro Trp Leu Met Ala Glu Ile Arg Arg Arg Ser
1 5 10
<210> 260
<211> 19
<212> PRT
<213> Homo sapiens
<400> 260
Ile His Asn Ser His Asp Leu Thr Tyr Phe Ala Tyr Leu Ile Lys Ala
1 5 10 15
Gln Pro Asp
<210> 261
<211> 12
<212> PRT
<213> Homo sapiens
<400> 261
Lys Phe Glu Val Leu Tyr Cys Gly Lys Val Thr Val
<210> 262
 <211> 13
<212> PRT
<213> Homo sapiens
<400> 262
 Ile Ser Ser Ile Arg Gln Leu Ser Lys Ala Met Lys Glu
 <210> 263
<211> 20
 <212> PRT
<213> Homo sapiens
 <400> 263
 Gly Glu Arg Arg Asn Trp Gly Gly Glu Val Tyr Tyr Ser Thr Gly Tyr
 Ser Ser Arg Lys
 <210> 264
 <211> 9
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<212> PRT
<213> Homo sapiens
<400> 264
Glu Pro Gly Ala Ala Gln Glu Ser Trp
<210> 265
<211> 202
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 265
Leu Cys Ala Arg Pro Ser Cys Ser Tyr Thr Gly Ala Glu Asn Gln Gly
Gln Pro Arg Ser Pro Gly Trp Gly Ser Ser His Val Gly Trp Gly Trp 20 25 30
Gly Val Gly Ser Pro Phe Leu Gly Ser Gln Glu Trp Ser Gly Leu Ala 35 40 45
 Pro Asp Leu Pro Asp Gln Glu Glu Glu Gln Pro Val Gly Arg His Ser 50 55 60
 Cys Pro Asp Met Ser Gln Cys Ile Lys Arg Gly His Gln Pro Val Gly
 Phe Ser Lys His Ala Trp Arg Cys Leu Val Gly Cys Cys Pro Trp Glu
 Glu Glu Lys Arg Ser Cys His Pro Phe Gly Ala Xaa Leu Leu Trp Val
 Leu Arg Phe Ala Leu Gln Pro Xaa Val Tyr Glu Asp Pro Ala Ala Leu
 Asp Gly Gly Glu Glu Gly Met Asp Ile Xaa Thr His Ile Leu Ala Leu
 Ala Pro Arg Leu Leu Lys Asp Ser Gly Ser Ile Phe Leu Glu Val Asp
145 150 150 155 160
 Pro Arg His Pro Xaa Leu Val Ser Ser Trp Leu Gln Ser Arg Pro Asp
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170 165

Leu Tyr Leu Asn Leu Val Ala Val Arg Arg Asp Phe Cys Gly Arg Pro 190 185

Arg Phe Leu His Ile Arg Arg Ser Gly Pro 195

<210> 266 <211> 37

<212> PRT

<213> Homo sapiens

<400> 266

Leu Cys Ala Arg Pro Ser Cys Ser Tyr Thr Gly Ala Glu Asn Gln Gly

Gln Pro Arg Ser Pro Gly Trp Gly Ser Ser His Val Gly Trp Gly Trp

Gly Val Gly Ser Pro 35

<210> 267 <211> 37

<212> PRT <213> Homo sapiens

<400> 267

Phe Leu Gly Ser Gln Glu Trp Ser Gly Leu Ala Pro Asp Leu Pro Asp

Gln Glu Glu Glu Gln Pro Val Gly Arg His Ser Cys Pro Asp Met Ser

Gln Cys Ile Lys Arg 35

<210> 268

<211> 37

<212> PRT <213> Homo sapiens

<220> <221> SITE

<222> (34) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 268

Gly His Gln Pro Val Gly Phe Ser Lys His Ala Trp Arg Cys Leu Val

Gly Cys Cys Pro Trp Glu Glu Glu Lys Arg Ser Cys His Pro Phe Gly 20

Ala Xaa Leu Leu Trp 35

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<210> 269
<211> 37
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 269
Val Leu Arg Phe Ala Leu Gln Pro Xaa Val Tyr Glu Asp Pro Ala Ala
Leu Asp Gly Gly Glu Glu Gly Met Asp Ile Xaa Thr His Ile Leu Ala
Leu Ala Pro Arg Leu
         35
<210> 270
<211> 54
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 270
Leu Lys Asp Ser Gly Ser Ile Phe Leu Glu Val Asp Pro Arg His Pro
Xaa Leu Val Ser Ser Trp Leu Gln Ser Arg Pro Asp Leu Tyr Leu Asn
Leu Val Ala Val Arg Arg Asp Phe Cys Gly Arg Pro Arg Phe Leu His
Ile Arg Arg Ser Gly Pro
<210> 271
<211> 19
 <212> PRT
<213> Homo sapiens
 <400> 271
 Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe Asn
Thr Pro Leu
```

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<210> 272
<211> 26
<212> PRT
<213> Homo sapiens
<400> 272
Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu Val Asn Ala Leu
                                      10
Ala Lys Gln Val Met Asn Leu Leu Val Pro
             20
<210> 273
<211> 20
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
His Xaa Ile Trp Leu Lys Val Ile Thr Xaa Asn Ile Leu Gln Leu Gln
Val Lys Pro Ser
             20
<210> 274
<211> 58
<212> PRT
<213> Homo sapiens
<400> 274
Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala Ala Thr
Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile Leu Gly Pro
 Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His Asn Ala
 Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu
      50
 <210> 275
 <211> 15
 <212> PRT
 <213> Homo sapiens
 <400> 275
 His Phe Ile Ile Thr Leu Thr Thr Phe Phe Thr Asn Tyr Phe Leu
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<210> 276
<211> 99
<212> PRT
<213> Homo sapiens
<400> 276
Met Lys Ile Thr Phe Gln Asp Leu Phe Pro Met Trp Asn Ser Phe Lys
Cys Phe Leu His Gly Asn Val Phe Ser Leu Phe Val Leu Phe Pro Leu
Leu Thr Cys Phe Ser Phe Pro Tyr Thr Val Asn Ser Gly Thr Lys Leu
Asp Trp Val Gly Trp Leu Val Gly Trp Phe Phe Leu Glu Phe Met Tyr
Ile Asn Lys Gly Phe Glu Val Thr Ser Glu Asn Asn Ile Ser Lys Arg
Val Leu Val Arg Glu Asn Ile Arg Ile Lys Ser Ser Pro Glu Arg Val
Leu Arg Met
<210> 277
<211> 19
<212> PRT
<213> Homo sapiens
<400> 277
Arg Phe Trp Gly Ser Tyr Glu Pro His Phe Ser Gln Glu Val Ser Val
 Ile Pro Pro
 <210> 278
 <211> 56
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (32)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 278
 Ile Arg Gly Asn Tyr Phe Ser Gly Arg Lys Lys Ser Ser Ser Asp Thr
 Pro Lys Gly Ser Lys Asp Lys Ile Ser Val Trp Asn Arg Ser Gln Xaa
 Ala Cys Ile Arg Ile Cys Lys Val His Pro Asn Tyr Ile Gln Ile Tyr
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<400> 281

Leu Trp His Ser Ala Thr Ser Phe <210> 279 <211> 74 <212> PRT <213> Homo sapiens <400> 279 Ala Gly Asn Gln Val Glu Pro Phe His Val Ser Leu Pro Ser Cys Leu Ser Pro Leu Pro His Leu Gly His Ser Met Gly Val Pro Ser Pro Thr Ala Trp Pro Ser Leu Ala Ser Phe His Thr Gln Lys Lys Ala Arg Ile Arg Gln Glu Glu Ser Pro Pro Leu Pro Ser Pro Gln Glu Leu Ala Phe Ser Ala Leu Arg Val Phe Phe Arg Val <210> 280 <211> 38 <212> PRT <213> Homo sapiens <400> 280 Phe Ile Gln Gln Asn Ile Ser Phe Leu Leu Gly Tyr Ser Ile Pro Val Gly Cys Val Gly Leu Ala Phe Phe Ile Phe Leu Phe Ala Thr Pro Val Phe Ile Thr Lys Pro Pro 35 <210> 281 <211> 347 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (340) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (341)

<223> Xaa equals any of the naturally occurring L-amino acids

Val Ser Ala His His Pro Ser Gly Ala Asp Glu Gly Val Thr Ala Xaa Gln Ile Leu Pro Thr Glu Glu Tyr Glu Glu Ala Met Ser Thr Met Gln 20 25 30Val Ser Gln Leu Asp Leu Phe Arg Leu Leu Asp Gln Asm Arg Asp Gly His Leu Gln Leu Arg Glu Val Leu Ala Gln Thr Arg Leu Gly Asn Gly Trp Trp Met Thr Pro Glu Ser Ile Gln Glu Met Tyr Ala Ala Ile Lys 65 70 75 80 Ala Asp Pro Asp Gly Asp Gly Val Leu Ser Leu Gln Glu Phe Ser Asn 85 90 95 Met Asp Leu Arg Asp Phe His Lys Tyr Met Arg Ser His Lys Ala Glu Ser Ser Glu Leu Val Arg Asn Ser His His Thr Trp Leu Tyr Gln Gly 115 120 125Glu Gly Ala His His Ile Met Arg Ala Ile Arg Gln Arg Val Leu Arg Leu Thr Arg Leu Ser Pro Glu Ile Val Glu Leu Ser Glu Pro Leu Gln Val Val Arg Tyr Gly Glu Gly Gly His Tyr His Ala His Val Asp Ser $165 170 175$ Gly Pro Val Tyr Pro Glu Thr Ile Cys Ser His Thr Lys Leu Val Ala $180 \ \ \, 185 \ \ \, 190 \ \ \,$ Asn Glu Ser Val Pro Phe Glu Thr Ser Cys Arg Tyr Met Thr Val Leu Phe Tyr Leu Asn Asn Val Thr Gly Gly Gly Glu Thr Val Phe Pro Val Ala Asp Asn Arg Thr Tyr Asp Glu Met Ser Leu Ile Gln Asp Asp Val 225 230 240 Asp Leu Arg Asp Thr Arg Arg His Cys Asp Lys Gly Asn Leu Arg Val Gly Gln Gly Trp Val Gly Asp Val Asp Asp Tyr Ser Leu His Gly Gly 275Cys Leu Val Thr Arg Gly Thr Lys Trp Ile Ala Asn Asn Trp Ile Asn 290 295 300 Val Asp Pro Ser Arg Ala Arg Gln Ala Leu Phe Gln Gln Glu Met Ala Arg Leu Ala Arg Glu Gly Gly Thr Asp Ser Gln Pro Glu Trp Ala Leu Asp Arg Ala Xaa Xaa Asp Ala Arg Val Glu Leu 340 345

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<210> 282
<211> 6
<212> PRT
<213> Homo sapiens
<400> 282
Ala Val Phe Trp Tyr Asn
<210> 283
<211> 18
<212> PRT
<213> Homo sapiens
<400> 283
Thr Val Leu Phe Tyr Leu Asn Asn Val Thr Gly Gly Gly Glu Thr Val
                                     10
Phe Pro
<210> 284
<211> 59
<212> PRT
<213> Homo sapiens
<400> 284
Asp Leu Phe Arg Leu Leu Asp Gln Asn Arg Asp Gly His Leu Gln Leu
Arg Glu Val Leu Ala Gln Thr Arg Leu Gly Asn Gly Trp Trp Met Thr
Pro Glu Ser Ile Gln Glu Met Tyr Ala Ala Ile Lys Ala Asp Pro Asp
 Gly Asp Gly Val Leu Ser Leu Gln Glu Phe Ser
 <210> 285
 <211> 38
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (16)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 285
 Val Ser Ala His His Pro Ser Gly Ala Asp Glu Gly Val Thr Ala Xaa
 Gln Ile Leu Pro Thr Glu Glu Tyr Glu Glu Ala Met Ser Thr Met Gln
 Val Ser Gln Leu Asp Leu
          35
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<210> 286
<211> 38
<212> PRT
<213> Homo sapiens
<400> 286
Phe Arg Leu Leu Asp Gln Asn Arg Asp Gly His Leu Gln Leu Arg Glu
Val Leu Ala Gln Thr Arg Leu Gly Asn Gly Trp Trp Met Thr Pro Glu
Ser Ile Gln Glu Met Tyr
          35
<210> 287
<211> 38
<212> PRT
<213> Homo sapiens
<400> 287
Ala Ala Ile Lys Ala Asp Pro Asp Gly Asp Gly Val Leu Ser Leu Gln
Glu Phe Ser Asn Met Asp Leu Arg Asp Phe His Lys Tyr Met Arg Ser 20 25
His Lys Ala Glu Ser Ser
 <210> 288
 <211> 38
 <212> PRT
 <213> Homo sapiens
 <400> 288
 Glu Leu Val Arg Asn Ser His His Thr Trp Leu Tyr Gln Gly Glu Gly
 Ala His His Ile Met Arg Ala Ile Arg Gln Arg Val Leu Arg Leu Thr 20 \hspace{0.25cm} 25 \hspace{0.25cm} 30 \hspace{0.25cm}
 Arg Leu Ser Pro Glu Ile
           35
 <210> 289
 <211> 38
 <212> PRT
 <213> Homo sapiens
 <400> 289
 Val Glu Leu Ser Glu Pro Leu Gln Val Val Arg Tyr Gly Glu Gly Gly
 His Tyr His Ala His Val Asp Ser Gly Pro Val Tyr Pro Glu Thr Ile
                                     25
                20
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157 Cys Ser His Thr Lys Leu 35 <210> 290 <211> 38 <212> PRT <213> Homo sapiens <400> 290 Val Ala Asn Glu Ser Val Pro Phe Glu Thr Ser Cys Arg Tyr Met Thr Val Leu Phe Tyr Leu Asn Asn Val Thr Gly Gly Gly Glu Thr Val Phe $20 \hspace{0.25cm} 25 \hspace{0.25cm} 30 \hspace{0.25cm}$ Pro Val Ala Asp Asn Arg 35 <210> 291 <211> 38 <212> PRT <213> Homo sapiens <400> 291 Thr Tyr Asp Glu Met Ser Leu Ile Gln Asp Asp Val Asp Leu Arg Asp Thr Arg Arg His Cys Asp Lys Gly Asn Leu Arg Val Lys Pro Gln Gln Gly Thr Ala Val Phe Trp 35 <210> 292 <211> 38 <212> PRT <213> Homo sapiens <400> 292 Tyr Asn Tyr Leu Pro Asp Gly Gln Gly Trp Val Gly Asp Val Asp Asp Tyr Ser Leu His Gly Gly Cys Leu Val Thr Arg Gly Thr Lys Trp Ile Ala Asn Asn Trp Ile Asn 35 <210> 293 <211> 43 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

Ala Arg

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<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 293
Val Asp Pro Ser Arg Ala Arg Gln Ala Leu Phe Gln Gln Glu Met Ala
Arg Leu Ala Arg Glu Gly Gly Thr Asp Ser Gln Pro Glu Trp Ala Leu
Asp Arg Ala Xaa Xaa Asp Ala Arg Val Glu Leu
<210> 294
<211> 15
<212> PRT
<213> Homo sapiens
<400> 294
Leu Leu Ala Asp Leu Met Arg Asn Tyr Asp Pro His Leu Arg Pro
<210> 295
<211> 19
<212> PRT
<213> Homo sapiens
<400> 295
Ile Ser Val Thr Tyr Phe Pro Phe Asp Trp Gln Asn Cys Ser Leu Ile
 Phe Gln Ser
<210> 296
<211> 16
 <212> PRT
 <213> Homo sapiens
 <400> 296
 Ser Met Ala Arg Gly Val Arg Lys Val Phe Leu Arg Leu Leu Pro Gln
 <210> 297
 <211> 18
 <212> PRT
 <213> Homo sapiens
 <400> 297
 Gln Ala Ser Pro Ala Ile Gln Ala Cys Val Asp Ala Cys Asn Leu Met
```

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<210> 298
<211> 17
<212> PRT
<213> Homo sapiens
<400> 298
Tyr Asn Gln Val Pro Asp Leu Pro Phe Pro Gly Asp Pro Arg Pro Tyr
Leu
<210> 299
<211> 15
<212> PRT
<213> Homo sapiens
<400> 299
Cys Ser Ile Ser Val Thr Tyr Phe Pro Phe Asp Trp Gln Asn Cys
<210> 300
<211> 18
<212> PRT
<213> Homo sapiens
<400> 300
Val Leu Lys Tyr Ala Leu Phe Leu Val Leu Lys Asn Tyr Tyr Tyr Cys
Pro Tyr
<210> 301
<211> 315
<212> PRT
<213> Homo sapiens
 <400> 301
Met Arg Glu Tyr Gly Val Glu Arg Asp Leu Ala Val Tyr Asn Gln Leu
 Leu Asn Ile Phe Pro Lys Glu Val Phe Arg Pro Arg Asn Ile Ile Gln
Arg Ile Phe Val His Tyr Pro Arg Gln Gln Glu Cys Gly Ile Ala Val
 Leu Glu Gln Met Glu Asn His Gly Val Met Pro Asn Lys Glu Thr Glu
 Phe Leu Leu Ile Gln Ile Phe Gly Arg Lys Ser Tyr Pro Met Leu Lys
 Leu Val Arg Leu Lys Leu Trp Phe Pro Arg Phe Met Asn Val Asn Pro 85 \\ 90 \\ 95
```

Phe Pro Val Pro Arg Asp Leu Pro Gln Asp Pro Val Glu Leu Ala Met 105 Phe Gly Leu Arg His Met Glu Pro Asp Leu Ser Ala Arg Val Thr Ile Tyr Gln Val Pro Leu Pro Lys Asp Ser Thr Gly Ala Ala Asp Pro Pro Gln Pro His Ile Val Gly Ile Gln Ser Pro Asp Gln Gln Ala Ala Leu Ala Arg His Asn Pro Ala Arg Pro Val Phe Val Glu Gly Pro Phe Ser Leu Trp Leu Arg Asn Lys Cys Val Tyr Tyr His Ile Leu Arg Ala Asp Leu Leu Pro Pro Glu Glu Arg Glu Val Glu Glu Thr Pro Glu Glu Trp Asn Leu Tyr Tyr Pro Met Gln Leu Asp Leu Glu Tyr Val Arg Ser Gly Trp Asp Asn Tyr Glu Phe Asp Ile Asn Glu Val Glu Glu Gly Pro Val Phe Ala Met Cys Met Ala Gly Ala His Asp Gln Ala Thr Met Ala Lys Trp Ile Gln Gly Leu Gln Glu Thr Asn Pro Thr Leu Ala Gln Ile Pro Val Val Phe Arg Leu Ala Gly Ser Thr Arg Glu Leu Gln Thr Ser Ser Ala Gly Leu Glu Glu Pro Pro Leu Pro Glu Asp His Gln Glu Glu Asp

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<210> 302
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Asp Asn Leu Gln Arg Gln Gln Gln Gly Gln Ser 310

Pro Glu Leu

<211> 19 <212> PRT

<213> Homo sapiens

<400> 302

Phe Gln Phe Gly Trp Ala Ser Thr Gln Ile Ser His Leu Ser Leu Ile

<210> 303

<211> 14

<212> PRT <213> Homo sapiens

<400> 303

Leu Arg Tyr Ala Phe Thr Val Val Ala Asn Ile Thr Val Tyr

<210> 308 <211> 13 <212> PRT <213> Homo sapiens <400> 308

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1
                 5
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<210> 304
<211> 17
<212> PRT
<213> Homo sapiens
<400> 304
Phe Val Tyr Gly Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu
Ala
<210> 305
<211> 17
<212> PRT
<213> Homo sapiens
<400> 305
Trp His Leu Val Gly Thr Val Cys Val Leu Leu Ser Phe Pro Phe Ile
                                       10
Phe
<210> 306
<211> 15
<212> PRT
<213> Homo sapiens
<400> 306
<400> 306
Gly His Phe Leu Asn Asp Leu Cys Ala Ser Met Trp Phe Thr Tyr
15
<210> 307
<211> 40
<212> PRT
<213> Homo sapiens
 <400> 307
 Ala Ile Pro Leu Arg Val Leu Val Val Leu Trp Ala Phe Val Leu Gly
                                        10
 Leu Ser Arg Val Met Leu Gly Arg His Asn Val Thr Asp Val Ala Phe
 Gly Phe Phe Leu Gly Tyr Met Gln
          35
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162
Val Gly Leu Ser Arg Val Leu Gly Arg His Thr Asp Val
<210> 309
<211> 17
<212> PRT
<213> Homo sapiens
<400> 309
Ser Phe Tyr Lys Met Lys Arg Asn Ser Tyr Asp Arg Leu Arg Lys Val
Va1
<210> 310
<211> 39
<212> PRT
<213> Homo sapiens
<400> 310
Leu His Gln Leu Arg Pro Pro His Arg Phe Pro Leu Ile Pro Pro Ala
Ala Ala Glu Gly Ala Gly Ala Pro Pro Gly Cys Gly Tyr Cys Val Phe
Trp Leu Leu Asn Pro Leu Pro
          35
<210> 311
<211> 72
<212> PRT
<213> Homo sapiens
<400> 311
Met Pro Trp Lys Arg Ala Val Val Leu Leu Met Leu Trp Phe Ile Gly
Gln Ala Met Trp Leu Ala Pro Ala Tyr Val Leu Glu Phe Gln Gly Lys 20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}
 Asn Thr Phe Leu Phe Ile Trp Leu Ala Gly Leu Phe Phe Leu Leu Ile
 Asn Cys Ser Ile Leu Ile Gln Ile Ile Ser His Tyr Lys Glu Glu Pro
 Leu Thr Glu Arg Ile Lys Tyr Asp
 <210> 312
 <211> 22
 <212> PRT
 <213> Homo sapiens
 <400> 312
 Ala Arg Ala Gln Pro Phe Ala Phe Gln Leu Arg Pro Ala Pro Gly Arg
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145

10 15 1 Pro Gly Ser Pro Val Ala 20 <210> 313 <211> 297 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (297) <223> Xaa equals any of the naturally occurring L-amino acids <400> 313 Ala Gly Leu Pro Gly Ala Leu Thr Ala Pro Ala Xaa His His Ala Asp Ser Arg Pro Ala Glu Leu Val Val Gln Pro Leu Ser Pro Pro Arg Pro Leu Leu Ser His Ala Gly Leu Ala Ser Ala Ala Gly Ala Ser Ser Leu Xaa Arg Val Pro Gly Glu Ala Glu Ser Leu Cys Ala Leu Ser Pro Gly Ser Ala Leu Arg Phe Pro Ala Ala Ser Cys Ser Arg Pro Xaa Arg Glu Pro Ser Gly Asp Glu Gly Thr Ala Gly Ala Leu Pro Ser Pro Trp Leu Ala Ala Leu Gly Pro Gly Gly Arg Pro Ala Val Arg Arg Val Leu Pro Arg Leu Gly Gly Arg Ala Gly Gln Leu Pro Arg Gly Leu Pro Val Pro Arg Gly Leu Arg His Ala Gly Arg Tyr His Leu Leu Arg Leu Leu Arg Ala Pro Leu Leu Arg Arg Gly Arg Arg Gln Ala Gly Ala Gly

Arg Leu His Gln Arg Pro Pro Arg Thr Gly Ala Pro Arg His His Cys

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Ala Ala Cys Leu Arg Pro Leu Ser His Arg Arg Leu His Leu His Cys
Val His His Pro Gly Leu Cys Ser Gly Tyr Leu Leu Leu His Leu Phe
Glu Thr Gln Gly Ala Leu Ala Ala Ala Asn Pro Leu Leu Thr Pro Gln
Leu Ser Asp Arg Asp Pro Ala His Asp Pro Asp Leu His Gln Pro Gln
Gly Thr Leu Pro Ala Val Gln His Ser His Glu Leu Gln Leu His Arg
Arg Leu His Pro Gln Val Leu Leu Ser His Leu Val Ser Trp Cys His
Pro Ser Ile Ser Leu Thr Pro Phe Ser Arg Ser Pro His Trp Leu Gly
Arg Ala Val Gln Thr Phe Ser Ser Xaa
<210> 314
<211> 38
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 314
Ala Gly Leu Pro Gly Ala Leu Thr Ala Pro Ala Xaa His His Ala
Asp Ser Arg Pro Ala Glu Leu Val Val Gln Pro Leu Ser Pro Pro Arg
Pro Leu Leu Ser His Ala
         35
<210> 315
<211> 40
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
 <222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
 <400> 315
Gly Leu Ala Ser Ala Ala Gly Ala Ser Ser Leu Xaa Arg Val Pro Gly
 Glu Ala Glu Ser Leu Cys Ala Leu Ser Pro Gly Ser Ala Leu Arg Phe
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Pro Ala Ala Ser Cys Ser Arg Pro

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<210> 316
<211> 40
<212> PRT
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<213> Homo sapiens

<220> <221> SITE <222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

40

<400> 316

<400> 316
Xaa Arg Glu Pro Ser Gly Asp Glu Gly Thr Ala Gly Ala Leu Pro Ser
1 10 15

Pro Trp Leu Ala Ala Leu Gly Pro Gly Gly Arg Pro Ala Val Arg Arg 20 25 30

Val Leu Pro Arg Leu Gly Gly Arg 35 40

<210> 317 <211> 40

<212> PRT

<213> Homo sapiens

<400> 317 Ala Gly Gln Leu Pro Arg Gly Leu Pro Val Pro Arg Gly Leu Arg His $\frac{1}{5}$ 10 15

Ala Gly Arg Tyr His Leu Leu Arg Leu Leu Arg Ala Pro Leu Leu Leu 20 \$25\$

Arg Arg Gly Arg Arg Gln Ala Gly 35 40

<210> 318

<211> 40

<212> PRT <213> Homo sapiens

<400> 318

Ala Gly Arg Leu His Gln Arg Pro Pro Arg Thr Gly Ala Pro Arg His 1 15

His Cys Ala Ala Cys Leu Arg Pro Leu Ser His Arg Arg Leu His Leu 25 30

His Cys Val His His Pro Gly Leu 35

<210> 319 <211> 40

<211> 40 <212> PRT

<213> Homo sapiens

<400> 319

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Cys Ser Gly Tyr Leu Leu Leu His Leu Phe Glu Thr Gln Gly Ala Leu
Ala Ala Ala Asn Pro Leu Leu Thr Pro Gln Leu Ser Asp Arg Asp Pro
Ala His Asp Pro Asp Leu His Gln
<210> 320
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 320
Pro Gln Gly Thr Leu Pro Ala Val Gln His Ser His Glu Leu Gln Leu
His Arg Arg Leu His Pro Gln Val Leu Leu Ser His Leu Val Ser Trp
Cys His Pro Ser Ile Ser Leu Thr Pro Phe Ser Arg Ser Pro His Trp
Leu Gly Arg Ala Val Gln Thr Phe Ser Ser Xaa
<210> 321
<211> 28
<212> PRT
<213> Homo sapiens
<400> 321
Val Ala His Thr Cys Asn Leu Ser Thr Leu Gly Gly Gln Gly Gly Arg
Ile Glu Arg Thr Ala Gly Gln Glu Phe Lys Thr Ser
<210> 322
<211> 115
<212> PRT
<213> Homo sapiens
<400> 322
His Tyr Lys Ser Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg
Val Asp Glu Val Leu Thr Asn Cys His Trp Thr Tyr Leu Lys Gln Asn
```

Arg Lys Met Ala Ala Asn Ser Ser Gly Gln Ala Leu His Ser Arg Asp 35 40 45

Pro Leu Leu Ile Arg Thr Ser Gly Ile Thr Leu Ser Ser Ser Ile Leu

60 50

Gln Pro Asn Arg Arg Gln Leu Cys Ser Met Leu Met His Ile His Leu 65 70 75 80

Asp Thr Ser Ser Leu Lys Thr Leu His Leu Gly Thr Leu Phe Phe Leu

Phe Tyr Leu Ala Leu Thr Gln Asn Glu Glu Asn Ile Cys Asp Gly Lys

Val Thr Leu 115

<210> 323

<211> 19 <212> PRT

<213> Homo sapiens

<400> 323 Thr Ile Lys Met Gln Thr Glu Asn Leu Gly Val Val Tyr Tyr Val Asn

Lys Asp Phe

<210> 324 <211> 13

<212> PRT <213> Homo sapiens

<400> 324 Val Glu Glu Asp Tyr Val Thr Asn Ile Arg Asn Asn Cys

<210> 325 <211> 7

<212> PRT

<213> Homo sapiens

<400> 325

Met Val Ser Asn Pro Pro Tyr

<210> 326

<211> 5

<212> PRT <213> Homo sapiens

<400> 326

His Ala Ser Glu Leu

<210> 327

<211> 129

<212> PRT

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<213> Homo sapiens
Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser
Thr His Ala Ser Glu Leu Met Pro Ile Ile Val Leu Ile Leu Val Ser
Leu Leu Ser Gln Leu Met Val Ser Asn Pro Pro Tyr Ser Leu Tyr Pro
Arg Ser Gly Thr Gly Gln Thr Ile Lys Met Gln Thr Glu Asn Leu Gly
Val Val Tyr Tyr Val Asn Lys Asp Phe Lys Asn Glu Tyr Lys Gly Met
Leu Leu Gln Lys Val Glu Lys Ser Val Glu Glu Asp Tyr Val Thr Asn
Ile Arg Asn Asn Cys Trp Lys Glu Arg Gln Gln Lys Thr Asp Met Gln
Tyr Ala Ala Lys Val Tyr Arg Asp Asp Arg Leu Arg Arg Arg Gln Met
Pro
<210> 328
<211> 35
<212> PRT
<213> Homo sapiens
<400> 328
Leu Val Ala Leu Asp Arg Met Glu Tyr Val Arg Thr Phe Arg Lys Arg
Glu Asp Leu Arg Gly Arg Leu Phe Trp Val Ala Leu Asp Leu Leu Asp 20 25 30
Leu Leu Asp
 <210> 329
 <211> 88
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (21)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 329
 Ser Val Ala Leu Phe Tyr Asn Phe Gly Lys Ser Trp Lys Ser Asp Pro
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Gly Ile Ile Lys Kaa Thr Glu Glu Gln Lys Lys Lys Thr Ile Val Glu

<213> Homo sapiens

Leu Ala Glu Thr Gly Ser Leu Asp Leu Ser Ile Phe Cys Ser Thr Cys Leu Ile Arg Lys Pro Val Arg Ser Lys His Cys Gly Val Cys Asn Arg Cys Ile Ala Lys Phe Asp His His Cys Pro Trp Val Gly Asn Cys Val 65 70 75 80Gly Ala Gly Asn His Arg Tyr Phe <210> 330 <211> 12 <212> PRT <213> Homo sapiens <400> 330 Phe Asp His His Cys Pro Trp Val Gly Asn Cys Val <210> 331 <211> 20 <212> PRT <213> Homo sapiens <400> 331 Gln Met Tyr Gln Ile Ser Cys Leu Gly Ile Thr Thr Asn Glu Arg Met Asn Ala Arg Arg <210> 332 <211> 12 <212> PRT <213> Homo sapiens <400> 332 Arg Val Thr Ser Ser Leu Ala Met Leu Ser Asp Ser <210> 333 <211> 15 <212> PRT <213> Homo sapiens <400> 333 Ala Ile Glu Arg Phe Ile Glu Pro His Glu Met Gln Gln Pro Leu <210> 334 <211> 49 <212> PRT

<400>334 Asn Ala Leu Val Phe Tyr Phe Ser Trp Lys Gly Cys Ser Glu Gly Asp 15
 Phe Cys Val Asn Pro Cys Phe Pro Asp Pro Cys Lys Pro Phe Val Glu 30
 Ile Ile Asn Ser Thr His Ala Ser Val Tyr Glu Ala Gly Pro Cys Trp 35
 Val

<210> 335 <211> 307 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (148) <223> Xaa equals any of the naturally occurring L-amino acids <400> 335 Ala Gly Ile Arg His Glu Arg Asn Arg Gly Arg Leu Leu Cys Met Leu
1 10 15 Ala Leu Thr Phe Met Phe Met Val Leu Glu Val Val Val Ser Arg Val Thr Ser Ser Leu Ala Met Leu Ser Asp Ser Phe His Met Leu Ser Asp Val Leu Ala Leu Val Val Ala Leu Val Ala Glu Arg Phe Ala Arg Arg Thr His Ala Thr Gln Lys Asn Thr Phe Gly Trp Ile Arg Ala Glu Val 65 70 75Met Gly Ala Leu Val Asn Ala Ile Phe Leu Thr Gly Leu Cys Phe Ala Ile Leu Leu Glu Ala Ile Glu Arg Phe Ile Glu Pro His Glu Met Gln Gln Pro Leu Val Val Leu Gly Val Gly Val Ala Gly Leu Leu Val Asn 115 120 125 Val Leu Gly Leu Cys Leu Phe His His His Ser Gly Phe Ser Gln Asp 130 135 140 Ser Gly His Xaa His Ser His Gly Gly His Gly His Gly His Gly Leu 145 150 155 160 Pro Lys Gly Pro Arg Val Lys Ser Thr Arg Pro Gly Ser Ser Asp Ile 165 170 170 175Asn Val Ala Pro Gly Glu Gln Gly Pro Asp Gln Glu Glu Thr Asn Thr Leu Val Ala Asn Thr Ser Asn Ser Asn Gly Leu Lys Leu Asp Pro Ala Asp Pro Glu Asn Pro Arg Ser Gly Asp Thr Val Glu Val Gln Val Asn

210 215 220 Gly Asn Leu Val Arg Glu Pro Asp His Met Glu Leu Glu Glu Asp Arg Ala Gly Gln Leu Asn Met Arg Gly Val Phe Leu His Val Leu Gly Asp Ala Leu Gly Ser Val Ile Val Val Val Asn Ala Leu Val Phe Tyr Phe Ser Trp Lys Gly Cys Ser Glu Gly Asp Phe Cys Val Asn Pro Cys Phe 275 280 Pro Asp Pro Cys Lys Ala Phe Val Glu Ile Leu Ile Val Leu Met His Gln Phe Met 305 <210> 336 <211> 504 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (148) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (403) <223> Xaa equals any of the naturally occurring L-amino acids <400> 336 Ala Gly Ile Arg His Glu Arg Asn Arg Gly Arg Leu Leu Cys Met Leu Ala Leu Thr Phe Met Phe Met Val Leu Glu Val Val Val Ser Arg Val Thr Ser Ser Leu Ala Met Leu Ser Asp Ser Phe His Met Leu Ser Asp Val Leu Ala Leu Val Val Ala Leu Val Ala Glu Arg Phe Ala Arg Arg 50 60 Thr His Ala Thr Gln Lys Asn Thr Phe Gly Trp Ile Arg Ala Glu Val Met Gly Ala Leu Val Asn Ala Ile Phe Leu Thr Gly Leu Cys Phe Ala 85 90 95 Ile Leu Leu Glu Ala Ile Glu Arg Phe Ile Glu Pro His Glu Met Gln Gln Pro Leu Val Val Leu Gly Val Gly Val Ala Gly Leu Leu Val Asn 115 120 125Val Leu Gly Leu Cys Leu Phe His His His Ser Gly Phe Ser Gln Asp 130 135 140Ser Gly His Xaa His Ser His Gly Gly His Gly His Gly Leu

155 160 145 150 Pro Lys Gly Pro Arg Val Lys Ser Thr Arg Pro Gly Ser Ser Asp Ile 165 170 175 Asn Val Ala Pro Gly Glu Gln Gly Pro Asp Gln Glu Glu Thr Asn Thr Leu Val Ala Asn Thr Ser Asn Ser Asn Gly Leu Lys Leu Asp Pro Ala Asp Pro Glu Asn Pro Arg Ser Gly Asp Thr Val Glu Val Gln Val Asn Gly Asn Leu Val Arg Glu Pro Asp His Met Glu Leu Glu Glu Asp Arg 225 230 235 240 Ala Gly Gln Leu Asn Met Arg Gly Val Phe Leu His Val Leu Gly Asp Ala Leu Gly Ser Val Ile Val Val Val Asn Ala Leu Val Phe Tyr Phe Ser Trp Lys Gly Cys Ser Glu Gly Asp Phe Cys Val Asn Pro Cys Phe 275 280 285 Pro Asp Pro Cys Lys Pro Phe Val Glu Ile Ile Asn Ser Thr His Ala $290 \hspace{0.5cm} 295 \hspace{0.5cm} 300 \hspace{0.5cm}$ Ser Val Tyr Glu Ala Gly Pro Cys Trp Val Leu Tyr Leu Asp Pro Thr 305 310 315 320 Leu Cys Val Val Met Val Cys Ile Leu Leu Tyr Thr Thr Tyr Pro Leu 325 330 330 335 Leu Lys Glu Ser Ala Leu Ile Leu Leu Gln Thr Val Pro Lys Gln Ile 340 345 350 Asp Ile Arg Asn Leu Ile Lys Glu Leu Arg Asn Val Glu Gly Val Glu Glu Val His Glu Leu His Val Trp Gln Leu Ala Gly Ser Arg Ile Ile 370 375 380 Ala Thr Ala His Ile Lys Cys Glu Asp Pro Thr Ser Tyr Met Glu Val 385 Ala Lys Xaa Ile Lys Asp Val Phe His Asn His Gly Ile His Ala Thr $_{405}^{\rm A15}$ Thr Ile Gln Pro Glu Phe Ala Ser Val Gly Ser Lys Ser Ser Val Val Pro Cys Glu Leu Ala Cys Arg Thr Gln Cys Ala Leu Lys Gln Cys Cys Gly Thr Leu Pro Gln Ala Pro Ser Gly Lys Asp Ala Glu Lys Thr Pro $450 \hspace{0.5cm} 455 \hspace{0.5cm} 460 \hspace{0.5cm}$ Ala Val Ser Ile Ser Cys Leu Glu Leu Ser Asn Asn Leu Glu Lys Lys
465 470 475 480 Pro Arg Arg Thr Lys Ala Glu Asn Ile Pro Ala Val Val Ile Glu Ile 485 490 495Lys Asn Met Pro Lys Gln Thr Thr

<210> 337 <211> 254

<212> PRT <213> Homo sapiens

500

<220> <221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 337

Met Phe Thr Phe Ala Ser Met Thr Lys Glu Asp Ser Lys Leu Ile Ala 1 10 15

Leu Ile Trp Pro Ser Glu Trp Gln Met Ile Gln Lys Leu Phe Val Val 20 25 30

Asp His Val Ile Lys Ile Thr Arg Ile Glu Val Gly Asp Val Asn Pro 35 40 45 Ser Glu Thr Gln Tyr Ile Ser Glu Pro Lys Leu Cys Pro Glu Cys Arg

Glu Gly Leu Leu Cys Gln Gln Gln Arg Asp Leu Arg Glu Tyr Thr Gln

Ala Thr Ile Tyr Val His Lys Val Val Asp Asn Lys Lys Val Met Lys

Asp Ser Ala Pro Glu Leu Asn Val Ser Ser Ser Glu Thr Glu Glu Asp 100 105 110

Lys Glu Glu Ala Lys Pro Asp Gly Glu Lys Asp Pro Asp Phe Asn Gln
115 120 125

Ser Xaa Gly Gly Thr Lys Arg Gln Lys Ile Ser His Gln Asn Tyr Ile 130 \$135\$

Ala Tyr Gln Lys Gln Val Ile Arg Arg Ser Met Arg His Arg Lys Val 145 150 150

Arg Gly Glu Lys Ala Leu Leu Val Ser Ala Asn Gln Thr Leu Lys Glu
165 170 175

Leu Lys Ile Gln Ile Met His Ala Phe Ser Val Ala Pro Phe Asp Gln

180 185 190

Asn Leu Ser Ile Asp Gly Lys Ile Leu Ser Asp Asp Cys Ala Thr Leu 195 200

Gly Thr Leu Gly Val Ile Pro Glu Ser Val Ile Leu Leu Lys Ala Asp 210 225 220

Glu Pro Ile Ala Asp Tyr Ala Ala Met Asp Asp Val Met Gln Val Cys 225 230 235

Met Pro Glu Glu Gly Phe Lys Gly Thr Gly Leu Leu Gly His $245 \ \ 250$

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<211> 21
<212> PRT
<213> Homo sapiens
<400> 338
Ser Ala Pro Glu Leu Asn Val Ser Ser Ser Glu Thr Glu Glu Asp Lys
                                       10
Glu Glu Ala Lys Pro
<210> 339
<211> 18
<212> PRT
<213> Homo sapiens
<400> 339
Lys Glu Leu Lys Ile Gln Ile Met His Ala Phe Ser Val Ala Pro Phe
                                       10
Asp Gln
<210> 340
<211> 58
<212> PRT
<213> Homo sapiens
<400> 340
Phe Gln Asp Lys Asn Arg Pro Cys Leu Ser Asn Trp Pro Glu Asp Thr
Asp Val Leu Tyr Ile Val Ser Gln Phe Phe Val Glu Glu Trp Arg Lys
Phe Val Arg Lys Pro Thr Arg Cys Ser Pro Val Ser Ser Val Gly Asn 35 40 45
Ser Ala Leu Leu Cys Pro His Gly Gly Leu
     50
<210> 341
<211> 42
<212> PRT
<213> Homo sapiens
<400> 341
Met Phe Thr Phe Ala Ser Met Thr Lys Glu Asp Ser Lys Leu Ile Ala
 Leu Ile Trp Pro Ser Glu Trp Gln Met Ile Gln Lys Leu Phe Val Val
Asp His Val Ile Lys Ile Thr Arg Ile Glu
          35
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<210> 342 <211> 42

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<212> PRT
<213> Homo sapiens
<400> 342
Val Gly Asp Val Asn Pro Ser Glu Thr Gln Tyr Ile Ser Glu Pro Lys
Leu Cys Pro Glu Cys Arg Glu Gly Leu Leu Cys Gln Gln Gln Arg Asp
Leu Arg Glu Tyr Thr Gln Ala Thr Ile Tyr
<210> 343
<211> 42
<212> PRT
<213> Homo sapiens
<400> 343
Val His Lys Val Val Asp Asn Lys Lys Val Met Lys Asp Ser Ala Pro
Glu Leu Asn Val Ser Ser Ser Glu Thr Glu Glu Asp Lys Glu Glu Ala
Lys Pro Asp Gly Glu Lys Asp Pro Asp Phe
<210> 344
<211> 42
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 344
Asn Gln Ser Xaa Gly Gly Thr Lys Arg Gln Lys Ile Ser His Gln Asn
Tyr Ile Ala Tyr Gln Lys Gln Val Ile Arg Arg Ser Met Arg His Arg
Lys Val Arg Gly Glu Lys Ala Leu Leu Val
         35
<210> 345
<211> 42
<212> PRT
<213> Homo sapiens
<400> 345
Ser Ala Asn Gln Thr Leu Lys Glu Leu Lys Ile Gln Ile Met His Ala
```

Phe Ser Val Ala Pro Phe Asp Gln Asn Leu Ser Ile Asp Gly Lys Ile

Leu Ser Asp Asp Cys Ala Thr Leu Gly Thr

<210> 346

<211> 44 <212> PRT

<213> Homo sapiens

<400> 346

Leu Gly Val Ile Pro Glu Ser Val Ile Leu Leu Lys Ala Asp Glu Pro
1 5 10 15

Ile Ala Asp Tyr Ala Ala Met Asp Asp Val Met Gln Val Cys Met Pro 20 25 30

Glu Glu Gly Phe Lys Gly Thr Gly Leu Leu Gly His

<210> 347 <211> 312

<211> 312 <212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (188)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 347

Phe Gln Asp Lys Asn Arg Pro Cys Leu Ser Asn Trp Pro Glu Asp Thr 1 10 15

Asp Val Leu Tyr Ile Val Ser Gln Phe Phe Val Glu Glu Trp Arg Lys

20 25 30
Phe Val Arg Lys Pro Thr Arg Cys Ser Pro Val Ser Ser Val Gly Asn

Ser Ala Leu Leu Cys Pro His Gly Gly Leu Met Phe Thr Phe Ala Ser

Met Thr Lys Glu Asp Ser Lys Leu Ile Ala Leu Ile Trp Pro Ser Glu 65 70 75 80

Trp Gln Met Ile Gln Lys Leu Phe Val Val Asp His Val Ile Lys Ile

Thr Arg Ile Glu Val Gly Asp Val Asn Pro Ser Glu Thr Gln Tyr Ile

Ser Glu Pro Lys Leu Cys Pro Glu Cys Arg Glu Gly Leu Leu Cys Gln

Gln Gln Arg Asp Leu Arg Glu Tyr Thr Gln Ala Thr Ile Tyr Val His 130 140

Lys Val Val Asp Asn Lys Lys Val Met Lys Asp Ser Ala Pro Glu Leu 145 150 155 160

Asn Val Ser Ser Ser Glu Thr Glu Glu Asp Lys Glu Glu Ala Lys Pro

```
Asp Gly Glu Lys Asp Pro Asp Phe Asn Gln Ser Xaa Gly Gly Thr Lys
Arg Gln Lys Ile Ser His Gln Asn Tyr Ile Ala Tyr Gln Lys Gln Val
Ile Arg Arg Ser Met Arg His Arg Lys Val Arg Gly Glu Lys Ala Leu
Leu Val Ser Ala Asn Gln Thr Leu Lys Glu Leu Lys Ile Gln Ile Met
His Ala Phe Ser Val Ala Pro Phe Asp Gln Asn Leu Ser Ile Asp Gly
Lys Ile Leu Ser Asp Asp Cys Ala Thr Leu Gly Thr Leu Gly Val Ile
Pro Glu Ser Val Ile Leu Leu Lys Ala Asp Glu Pro Ile Ala Asp Tyr
Ala Ala Met Asp Asp Val Met Gln Val Cys Met Pro Glu Glu Gly Phe
Lys Gly Thr Gly Leu Leu Gly His
305
                    310
<210> 348
<211> 18
<212> PRT
<213> Homo sapiens
<400> 348
Arg Gly Glu Arg Ser Glu Glu Leu Leu Gly Arg Glu Gly Leu Ser Gly
Ser Gln
<210> 349
<211> 179
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 349
Ala Glu Ala Ala Glu Gly Glu Lys Gly Val Arg Ser Cys Trp Ala Glu
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 Arg Asp Cys
 Pro Ala Pro Arg Cys
 Trp Ala Ser Trp Gly Ala Gln Pro 20

 Ser Trp Asp Gly
 Ser Gln Val Leu Leu Trp Arg
 Ser Cys Cys Cys Cys Cys 45

 Cys Cys Trp Pro Pro Ala Phe Ser Thr Asp Gly Arg Thr Val Thr Trp 65
 Arg Gly Thr Val Gln Leu Gln Gly Glu Thr Glu Ser Ala Gly Pro Ser 80

 Leu Gly Pro Ser Gly Gly Gly Ala Thr Trp Glu Ser Ala Gly Pro 85
 Ser Cys Trp Pro Pro Ala Thr Tyr Leu Met Cys Arg Met Trp Ala Ser Thr Thr Thr Thr Thr Thr Thr Thr Thr 115

 Pro Thr Thr Thr Pro Ala Thr Xaa Leu Thr Thr Xaa Thr Thr Thr Thr Thr Thr Thr Thr 125

 Pro Thr Ala Thr Ile Pro Ala Thr Leu Ala Glu Ala Ala Val Ala Gly 130

 Ala Cys Gly Gln Gln Leu Pro Leu Pro Ser His Leu Trp Gly Glu Arg 165

 Val Asp Pro Met Phe Pro Cys Gly Arg Met His Leu Trp Gly Glu Arg 165

 Xaa Glu Gln

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<210> 350
<211> 268
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 350
Gly Gly Gln Asp Gly His Phe Thr Ser Thr Cys Val Leu Ala Leu Pro
Arg His Ala Cys His Phe Trp Gly Ser Leu Gly Val Thr Val Thr Arg
Arg Ala Val Gln Pro Arg Lys Ser Thr Leu Ala Leu His Ser Pro Asn
```

Pro Ser Ala Leu Gln Thr Gln Cys Ser Ser Ile Leu Cys Cys His Ser Thr Leu Gly His Ala Met Gln Met Gln Leu Glu Gln Ala Pro Val Tyr Cys Ser Xaa Arg Ser Pro Gln Arg Cys Ile Leu Pro His Gly Asn Met Gly Ser Thr Cys Pro Gly Asn Arg Trp Glu Gly Arg Gly Ser Cys Cys Pro Gln Ala Pro Ala Thr Ala Ala Ser Ala Ser Val Ala Gly Met Val Ala Val Gly Val Val Val Val Val Xaa Val Val Arg Xaa Val Ala Gly 130 135 Val Val Val Val Val Glu Ala His Ile Arg His Met Arg Tyr Val Ala Arg Met Thr Val Met Val Lys Asp Ser Gln Val Ala Pro Pro Pro Glu Gly Pro Arg Leu Gly Pro Ala Asp Ser Val Ser Pro Cys Ser Cys Thr Val Pro Leu His Val Thr Val Leu Pro Ser Val Glu Lys Ala Gly Gly Gln Gln Gln Gln Gln Gln Asp Arg His Ser Ser Thr Cys Asp Pro Ser His Glu Gly Cys Ala Pro Gln Glu Ala Gln His Leu Gly Ala Gly 230 225 Gln Ser Leu Ser Ala Gln Gln Leu Leu Thr Pro Phe Ser Pro Ser Ala Ala Ser Ala Gln Pro Ser Gln Ser Leu Asn Phe Val

```
<210> 351
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<211> 12 <212> PRT

<213> Homo sapiens

<400> 351 Phe His Gly Leu Gly Arg Leu His Thr Val His Leu 1 5 10

<210> 352

<211> 21

<212> PRT

<213> Homo sapiens

Asn Ala Gln Leu Arg 20

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<210> 353
<211> 9
<212> PRT
<213> Homo sapiens
<400> 353
Ala Phe Arg Gly Leu His Ser Leu Asp
<210> 354
<211> 12
<212> PRT
<213> Homo sapiens
<400> 354
His Glu Val Pro Asp Ala Pro Arg Pro Thr Pro Thr
<210> 355
<211> 101
<212> PRT
<213> Homo sapiens
<400> 355
Met Val Val Ala Asp Arg Asn Arg Ala Ser Ser Ser Ser Tyr Leu Cys
Leu Leu Phe Ser Leu Ser Leu Phe Leu Cys His Glu Thr Val Cys
Asp Arg Ala Thr Cys Leu Phe Phe Phe Leu Lys Phe Phe Phe Leu Phe
Met Cys Arg Cys Met Ser Trp Gly Phe Lys Asn Phe Lys Ala Gly Leu
Leu Met Gln Ser Met Pro Thr Ser Gly Ile Leu Arg Glu Arg Lys Arg
Leu His Val Val Arg Ile Pro Gln Gly Thr Glu Lys Lys Leu Glu Thr
Val Glu Met Gln Ile
            100
<210> 356
 <211> 12
 <212> PRT
 <213> Homo sapiens
 <400> 356
 Ile Pro Gln Gly Thr Glu Lys Lys Leu Glu Thr Val
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<211> 37
<212> PRT
<213> Homo sapiens
<400> 357
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Asn Pro Arg Leu Pro Leu Pro Arg Gly Gly Ser Leu Arg Leu Leu Ser 1 10 15

Ser Pro Ala Asn Ser Asn Asn Ala Lys Ala Tyr Pro Phe Ser Arg Phe 20 25 30

Pro Ser Pro Ile Phe

<210> 358 <211> 48 <212> PRT

<210> 359

<212> PRT <213> Homo sapiens

 $<\!400\!>358$ Met Val Gln Glu Ala Pro Ala Leu Val Arg Leu Ser Leu Gly Ser His 1

Arg Val Lys Gly Pro Leu Pro Val Leu Lys Leu Gln Pro Glu Gly Trp 25 30

Ser Pro Ser Thr Leu Trp Ser Cys Ala Ser Val Trp Lys Asp Ser Cys 35 40 45

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<210> 360
<211> 33
<212> PRT
<213> Homo sapiens
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Phe Tyr Phe Ile Thr Leu Ile Phe Phe Leu Ala Trp Leu Val Lys Asn
Val Phe Ile Ala Val Ile Ile Glu Thr Phe Ala Glu Ile Arg Val Gln
Phe
<210> 361
<211> 15
<212> PRT
<213> Homo sapiens
<400> 361
Ser Ile Phe Thr Val Tyr Glu Ala Ala Ser Gln Glu Gly Trp Val
<210> 362
<211> 21
<212> PRT
<213> Homo sapiens
<400> 362
His Glu Gly Thr Ser Ile Phe Thr Val Tyr Glu Ala Ala Ser Gln Glu
Gly Trp Val Phe Leu
<210> 363
<211> 8
<212> PRT
<213> Homo sapiens
<400> 363
Cys Lys Thr Ser Phe Gly Leu Ala
<210> 364
<211> 122
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 364
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      Met
      11e
      Thr
      Leu
      Ser
      Ser
      Ala
      Phe
      Ser
      Ala
      Lys
      Gln
      Lys
      Thr
      His
      Ala
      Cys
      Met
      Cys
      Ala
      Thr
      Asp
      Met
      Ala
      Asn
      Pro

      Lys
      Leu
      Val
      His
      Phe
      Glu
      Val
      1le
      Val
      Ala
      Leu
      Gly
      Gln
      Arg
      Thr
      Trp
      Leu
      Ala
      His
      His
      Ala
      Ala
      Leu
      Ro
      75
      Ro
      Glu
      Ala
      Leu
      His
      Thr
      Ala
      Leu
      Ala
      Leu
      Ala
      Leu
      Leu<
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Thr Leu Lys Arg Ser Gln Gly Phe Glu Gly 115

<210> 365 <211> 13

<212> PRT

<213> Homo sapiens

<400> 365

Cys Ala Ala Pro Gly Asn Lys Thr Ser His Leu Ala Ala 1 5 10

<210> 366

<211> 24

<212> PRT <213> Homo sapiens

... ...

<400> 366 Glu His Pro Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala 1 5 10 15

Ser Cys Leu Pro Ala Met Leu Leu 20

<210> 367

<211> 15

<212> PRT <213> Homo sapiens

<400> 367

Leu Leu Asp Pro Ser Cys Ser Gly Ser Gly Met Pro Ser Arg Gln
1 5 10 15

<210> 368

<211> 23 <212> PRT

<213> Homo sapiens

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<400> 368
Tyr Ser Thr Cys Ser Leu Cys Gln Glu Glu Asn Glu Asp Val Val Arg
Asp Ala Leu Gln Gln Asn Pro
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<210> 369
<211> 470
<212> PRT
<213> Homo sapiens
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<222> (277)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (431)
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Ser Ala Thr Glu His Gly Ala Val Cys Cys Ser Cys Arg Arg Val Gly
Arg Arg Gly Glu Pro Pro Gly Ser Ile Lys Gly Leu Val Tyr Ser Ser
Asn Phe Gln Asn Val Lys Gln Leu Tyr Ala Leu Val Cys Glu Thr Gln
Arg Tyr Ser Ala Val Leu Asp Ala Val Ile Ala Ser Ala Gly Leu Leu
Arg Ala Glu Lys Lys Leu Arg Pro His Leu Ala Lys Val Leu Val Tyr
 Glu Leu Leu Gly Lys Gly Phe Arg Gly Gly Gly Arg Trp Lys
 Ala Leu Leu Gly Arg His Gln Ala Arg Leu Lys Ala Glu Leu Ala Arg
```

100

Leu Lys Val His Arg Gly Val Ser Arg Asn Glu Asp Leu Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu Pro Arg Phe Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp Val Val Asp Tyr Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala Ser Ser Leu Asp Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu Asp Pro Leu Met Pro Glu Leu Leu Val Phe Pro Ala Gln Thr Asp Leu His Glu His Pro Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala Ser Cys Leu Pro Ala Met 210 215 220 Leu Leu Asp Pro Pro Pro Gly Ser His Val Ile Asp Ala Cys Ala Ala Pro Gly Asn Lys Thr Ser His Leu Ala Ala Leu Leu Lys Asn Gln Gly Lys Ile Phe Ala Phe Asp Leu Asp Ala Lys Arg Leu Ala Ser Met Ala 260 265 270 Thr Leu Leu Ala Xaa Ala Gly Val Ser Cys Cys Glu Leu Ala Glu Glu Asp Phe Leu Ala Val Ser Pro Xaa Asp Pro Arg Tyr Xaa Glu Val His Tyr Xaa Leu Leu Asp Pro Ser Cys Ser Gly Ser Gly Met Pro Ser Arg Gln Leu Glu Xaa Pro Gly Ala Gly Thr Pro Ser Pro Val Arg Leu His Ala Leu Ala Gly Phe Gln Gln Arg Ala Leu Cys His Ala Leu Thr Phe Pro Ser Leu Gln Arg Leu Val Tyr Ser Thr Cys Ser Leu Cys Gln Glu Glu Asn Glu Asp Val Val Arg Asp Ala Leu Gln Gln Asn Pro Gly Ala Phe Arg Leu Ala Pro Ala Leu Pro Ala Trp Pro His Arg Gly Leu Ser Thr Phe Pro Gly Ala Glu His Cys Leu Arg Ala Ser Pro Glu Thr Thr Leu Ser Ser Gly Phe Phe Val Ala Val Ile Glu Arg Val Glu Xaa Pro Ser Ser Ala Ser Gln Ala Lys Ala Ser Ala Pro Glu Arg Thr Pro Ser Pro Ala Pro Lys Arg Lys Lys Arg Gln Gln Arg Ala Ala Gly Ala

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Cys Thr Pro Pro Cys Thr
<210> 370
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<212> PRT
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<222> (236)
<223> Xaa equals any of the naturally occurring L-amino acids
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Tyr Glu Pro His Ser Thr His Ser Arg Glu Arg Ala Met Thr Ser His
 Ala Arg Val Ser Leu Gly Pro Ser Arg Asp Pro Leu Glu Arg Pro His
 Leu Ala Lys Val Leu Val Tyr Glu Leu Leu Leu Gly Lys Gly Phe Arg
 Gly Gly Gly Arg Trp Lys Ala Leu Leu Gly Arg His Gln Ala Arg
 Leu Lys Ala Glu Leu Ala Arg Leu Lys Val His Arg Gly Val Ser Arg
 Asn Glu Asp Leu Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln
 Leu Pro Arg Phe Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp
 Val Val Asp Tyr Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala
 Ser Ser Leu Asp Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu
                         135
 Asp Pro Leu Met Pro Glu Leu Leu Val Phe Pro Ala Gln Thr Asp Leu
                     150
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His Glu His Pro Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala Ser Cys Leu Pro Ala Met Leu Leu Asp Pro Pro Pro Gly Ser His Val Ile Asp Ala Cys Ala Ala Pro Gly Asn Lys Thr Ser His Leu Ala Ala Leu Leu Lys Asn Gln Gly Lys Ile Phe Ala Phe Asp Leu Asp Ala Lys Arg Leu Ala Ser Met Ala Thr Leu Leu Ala Xaa Ala Gly Val Ser Cys Cys Glu Leu Ala Glu Glu Asp Phe Leu Ala Val Ser Pro Xaa Asp Pro Arg Tyr Xaa Glu Val His Tyr Xaa Leu Leu Asp Pro Ser Cys Ser Gly Ser Gly Met Pro Ser Arg Gln Leu Glu Glu Pro Gly Ala Gly Thr Pro Ser Pro Val Arg Leu His Ala Leu Ala Gly Phe Gln Gln Arg Ala 295 Leu Cys His Ala Leu Thr Phe Pro Ser Leu Gln Arg Leu Val Tyr Ser 310 Thr Cys Ser Leu Cys Gln Glu Glu Asn Glu Asp Val Val Arg Asp Ala Leu Gln Gln Asn Pro Gly Ala Phe Arg Leu Ala Pro Ala Leu Pro Ala Trp Pro His Arg Gly Leu Ser Thr Phe Pro Gly Ala Glu His Cys Leu 360 Arg Ala Ser Pro Glu Thr Thr Leu Ser Ser Gly Phe Phe Val Ala Val Ile Glu Arg Val Glu Val Pro Ser Ser Ala Ser Gln Ala Lys Ala Ser 390 Ala Pro Glu Arg Thr Pro Ser Pro Ala Pro Lys Arg Lys Lys Arg Gln Gln Xaa Ala Ala Ala Gly Ala Cys Thr Pro Pro Cys Thr

<210> 371 <211> 245

<212> PRT

<213> Homo sapiens

<400>> 371 Met Gly Thr His Ser Val Ser Gly Arg Phe Ser Lys Thr Ser Pro Pro 1 5 10 10 15 Tyr Cys Pro Pro Ser Ser Ser Leu Pro Gly Pro Ile Ser Ser Ile Gly

Phe Asn Lys Ser Leu His Glu Cys Leu Phe Ile Ser Glu Lys Glu Leu Leu Pro Leu Pro Phe Pro Phe Pro Asp Leu Lys Ser Phe Ile Ser Tyr Leu Thr Ser Met Leu Lys Pro Gly Pro Leu Ile Val Ser Leu Lys Ile
65 70 75 80 Trp Val Ser Tyr Pro Ile Thr Arg Pro Arg Tyr Leu Pro Pro Met Leu Lys Ser Leu Asn Ile Ser Phe Leu Tyr Ile Gln Tyr Ile Trp Ala Tyr Ile His Leu Tyr Thr Ser Phe Tyr Ile Tyr Ile Ile Ser Val Ser Phe 115 120 125 Phe Leu Asp Lys Pro Phe Ile Tyr Val Ile Ser Phe Pro Lys Pro Pro His Phe Leu Phe Ala Ser Leu Ser Lys Thr Gln Glu Phe His Phe His Val Pro Gln His His Phe Phe Leu Ile Phe Ser Pro Gln Val Ser Ser Pro Ile Ser Cys Phe Ala Arg Leu Leu Lys Ser Pro Leu Phe Thr Pro Val Pro Thr Glu Ile Ser Pro Phe Tyr Asn Cys Ala Tyr Tyr Ser Ala Asp Ile Pro Ser Pro Gln Leu Val Trp Gly Pro Ile Ser His Gln Thr Trp Leu Leu Lys Leu Gly Leu Leu Pro Lys Arg Gly Phe Gln Val Arg Gly Asp Arg Leu

<210> 372

<211> 29 <212> PRT

<213> Homo sapiens

<400> 372

Cys Phe Ala Arg Leu Leu Lys Ser Pro Leu Phe Thr Pro Val Pro Thr

Glu Ile Ser Pro Phe Tyr Asn Cys Ala Tyr Tyr Ser Ala 20 25

<210> 373 <211> 111 <212> PRT

<213> Homo sapiens

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<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids <400> 373 Asn Arg Glu Gln Lys Ala Lys Ser Gln Leu Leu Arg Ser Gln Leu Tyr Ser Thr Leu Asp Leu Pro Tyr Phe Phe Gln Cys Val Gly Thr Arg Cys Thr Ala Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys Xaa Tyr Leu Pro Ile His Trp Gln Val Asn Leu His Leu Val Tyr Leu Ala Met Leu Cys Phe Leu Pro Ile Pro Leu Leu Ser Ile Leu Ser Pro Gln Thr Gln Ala Ser Arg Leu Leu Asp Glu Thr Val Arg Arg Lys His Phe Leu Thr Tyr Pro Phe Gly Ile Ser Ser Ile Ile Thr Gln Ala Leu Leu

<210> 374 <211> 51 <212> PRT <213> Homo sapiens

<400> 374

Pro Gly Pro Glu Ala Gln Pro Trp Pro Gly Pro Asp Leu Pro Ala Val Gly Ser Arg Gly Pro Gly Arg Leu Leu Ala Ala Val Ser Ala Pro Arg Leu Gly Leu Gly Leu Ala Gly Ala Asp Pro Val Gly Pro Glu Ala Cys

His Leu Pro 50

<210> 375 <211> 42 <212> PRT <213> Homo sapiens

<220>

<221> SITE <222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 375

Gly Arg Leu Arg Gly Pro Asp Glu Val Gly Ala Pro Phe His Pro Gly

Pro Ala Thr Pro Gly Leu Ala Asp Pro Leu Arg Pro Ala Glu Pro Xaa 20 30

His Trp Leu Pro Ser Leu Trp Gly Pro Thr

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<210> 376
<211> 19
<212> PRT
<213> Homo sapiens
<400> 376
Pro Gly Pro Glu Ala Gln Pro Trp Pro Gly Pro Asp Leu Pro Ala Val
Gly Ser Arg
<210> 377
<211> 19
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 377
Ala Thr Pro Gly Leu Ala Asp Pro Leu Arg Pro Ala Glu Pro Xaa His
Trp Leu Pro
<210> 378
<211> 251
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (241)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 378
Gln Trp Pro Glu Lys Asp Pro Val Met Ala Ala Ser Ser Ile Ser Ser
Pro Trp Gly Lys His Val Phe Lys Ala Ile Leu Met Val Leu Val Ala
Leu Ile Leu Leu His Ser Ala Leu Ala Gln Ser Arg Arg Asp Phe Ala
Pro Pro Gly Gln Gln Lys Arg Glu Ala Pro Val Asp Val Leu Thr Gln
Ile Gly Arg Ser Val Arg Gly Thr Leu Asp Ala Trp Ile Gly Pro Glu
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Thr Met His Leu Val Ser Glu Ser Ser Ser Gln Val Leu Trp Ala Ile Ser Ser Ser Ala Ile Ser Val Ala Phe Phe Ala Leu Ser Gly Ile Ala Ala Ile Lu Lu Asa Ala Lu Gly Lu Ala Gly Asp Tyr Leu Ala Gln Gly Lu Lys Lu Ser Pro Gly Gln Val Gln Thr Phe Lu Lu Lu Trp Gly Ala Gly Ala Lu Lu Val Tyr Trp Lu Lu Lu Ser Lu Lu Lu Gly Lu Val The Lu Lu Lu Gly Lu Val Lu Trp Gly Ala Ile Ala Gly Ala Ile Lu Lu Lu Gly Arg Ile Lu Trp Gly Lu Lys Lu Val Ile Phe Info Info Lu Ala Lu Lu Lu Lu Lu Ala Lu Lu Met Arg Ser Val Pro Asp Pro Ser Thr Ala Lu Ser Lu Lu Lu Tyr Ala Lu Ser Cu Arg Ala Lu Lu Lu Lu Lu Ala Ser Gly Ala Gln Lu Cys Val Ala Lys Val Arg Gly Lu Glu Arg Gly Lu Glu Arg Gln Arg Gly Lu Glu Arg Gln Val Glu Glu Cu Lys Gly Ala Gln Arg Gln Arg Gly Lu Glu Ala Lys Gly Ala Arg Ser Val Glu Glu Glu Glu

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<210> 379
<211> 116
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 379
Glu Xaa Pro Arg Xaa Ile Xaa Gly Xaa Asn Ala Pro Gln Val Pro Val
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<222> (9)

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Val Phe Val Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly
Val Asn Tyr Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu
Phe Tyr Phe Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys
Ser Ser Leu Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile
Phe Thr Leu Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly
            100
                                 105
Pro Lys Ile Ile
        115
<210> 380
<211> 12
<212> PRT
<213> Homo sapiens
<400> 380
Asn Ile Leu Leu Val Asn Leu Leu Val Ala Met Phe
<210> 381
<211> 10
<212> PRT
<213> Homo sapiens
<400> 381
Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu
<210> 382
<211> 316
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
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 <222> (296)
 <223> Xaa equals any of the naturally occurring L-amino acids
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 <221> SITE
 <222> (306)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 382
 Glu Xaa Pro Arg Xaa Ile Xaa Gly Xaa Asn Ala Pro Gln Val Pro Val
 Arg Asn Ser Arg Val Asp Pro Arg Val Arg Pro Arg Val Arg Ser Leu
 Val Phe Val Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly
 Val Asn Tyr Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu
 Phe Tyr Phe Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys
 Ser Ser Leu Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile
```

Met Xaa Thr Met Arg Leu Trp His Gly Arg Val Ser 305 315

<210> 383

<211> 129 <212> PRT

<213> Homo sapiens

C400> 383
Met Glu Phe Gln Asn Met Tyr Ile Gln Leu Phe Gly Phe Ser Phe Phe 15
Ile Val Ile Ile Val Arg Met Leu Leu Leu Gly Leu Cys Val Ser Ala 25
Arg Gln Pro Val Met Pro Arg Ala Thr Leu Trp Gly His Leu Ser Pro 40
Ala Trp Val Leu Val Pro Trp Thr Pro Arg Ala Cys Gly Gln Ala Ala 55
Pro Gly Arg Gly His Val Ala Ser Asp His Lys Ser Gly Leu Pro Trp 65
Pro Lys His Cys Ser Cys Leu His Pro Arg Ala Ser Gln Pro Cys Leu

<221> SITE <222> (205)

95 85 90 Phe Ser Leu Asn Ser Asn Arg Thr Val Phe Thr Ala Ile Gln Arg Val Ala Leu Gly Trp Thr Phe Trp Val Gln Ala Asn Leu Val Pro Arg Cys 120 Thr <210> 384 <211> 417 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (109) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (121) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (135) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (139) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (188) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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170

165

Glu Lys Arg Leu Gly Ser Pro Ala Pro Arg Glu Xaa Glu Gln Pro His Thr Gln Gln Gly Pro Glu Lys Leu Ala Gly Asn Ala Xaa Tyr Thr Lys Pro Ser Phe Thr Gln Glu His Lys Ala Ala Val Ser Val Leu Xaa Pro Phe Ser Lys Gly Ala Pro Ser Thr Ser Ser Pro Ala Lys Ala Leu Pro Gln Val Arg Asp Arg Trp Lys Asp Xaa Thr His Xaa Ile Ser Ile Leu Glu Ser Ala Lys Ala Arg Val Thr Asn Met Lys Ala Ser Lys Pro Ile Ser His Ser Arg Lys Lys Tyr Arg Phe His Lys Thr Arg Ser Arg Met Thr His Arg Thr Pro Lys Val Lys Lys Ser Pro Lys Phe Arg Lys Lys Ser Tyr Leu Ser Arg Leu Met Leu Ala Asn Arg Pro Pro Phe Ser Ala 305 310 Ala Xaa Ser Leu Ile Asn Ser Pro Ser Gln Gly Ala Phe Ser Ser Leu Gly Asp Leu Ser Pro Gln Glu Asn Pro Phe Leu Xaa Val Ser Ala Pro Ser Glu His Phe Ile Glu Thr Thr Asn Ile Lys Asp Thr Thr Ala Arg 360 Asn Ala Leu Glu Glu Asn Val Phe Met Glu Asn Thr Asn Met Pro Glu Val Thr Ile Ser Glu Asn Thr Asn Tyr Asn His Pro Pro Glu Ala Asp Ser Xaa Gly Thr Ala Phe Asn Leu Gly Pro Thr Val Lys Gln Thr Glu

Thr

<210> 385 <211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 385

Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu Ala Val Lys Lys Asp 1 10 15

Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met Glu 20 25 30

```
Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met Arg Ile
Leu Ser Ala Glu Asn Ile Pro Asn Leu Pro Pro Gly Gly Leu Ala
Gly Xaa Arg Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn Pro His 65 70 75 80
Arg Glu Ser Asp Gly Gly Ala Gly Asp Leu Glu Asp Pro Trp
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<210> 386 <211> 56 <212> PRT <213> Homo sapiens

<400> 386 Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu Ala Val Lys Lys Asp

Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met Glu 20 25 30Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met Arg Ile

Leu Ser Ala Glu Asn Ile Pro Asn

<210> 387 <211> 26 <212> PRT <213> Homo sapiens

<400> 387 Arg Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn Pro His Arg Glu

Ser Asp Gly Gly Ala Gly Asp Leu Glu Asp

<210> 388 <211> 16

<212> PRT <213> Homo sapiens

<400> 388

Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met 1 5 10 15

<210> 389 <211> 24

<212> PRT

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<213> Homo sapiens
<400> 389
Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met Arg Ile
                                     10
Leu Ser Ala Glu Asn Ile Pro Asn
             20
<210> 390
<211> 9
<212> PRT
<213> Homo sapiens
<400> 390
Cys Phe Ser Asn Ala Pro Lys Val Ser
<210> 391
<211> 69
<212> PRT
<213> Homo sapiens
<400> 391
Met Ser Arg Lys Ser Leu Ala Phe Pro Ile Ile Cys Ser Tyr Leu Cys
Phe Leu Thr Val Ala Thr Cys Ser Ile Ala Cys Thr Thr Val Phe Phe
Ala Asn Leu Arg His Thr Arg Tyr Ile Cys Ile Glu Leu Ser Ala Leu
Glu Thr Ser Gly Val Ile Ser Pro Gln Ile Asn Asn Val Pro Glu Val
His Gly Lys Tyr Ser
<210> 392
<211> 16
<212> PRT
<213> Homo sapiens
<400> 392
Ile Gln Lys Met Thr Arg Val Arg Val Val Asp Asn Ser Ala Leu Gly
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<211> 14
<212> PRT
<213> Homo sapiens
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<400> 393

<210> 393

Pro Arg Cys Ile His Val Tyr Lys Lys Asn Gly Val Gly Lys

1 5 1

<210> 394 <211> 15

<212> PRT <213> Homo sapiens

<400> 394

Gly Asp Gln Ile Leu Leu Ala Ile Lys Gly Gln Lys Lys Lys Ala 1 5 10 15

<210> 395 <211> 15

<212> PRT <213> Homo sapiens

<400> 395

<400> 395
Asn Pro Val Gly Thr Arg Ile Lys Thr Pro Ile Pro Thr Ser Leu
1 5 10 15

<210> 396

<211> 171 <212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (20)

<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 396

Val Leu Ile Pro Ser Phe Ser Ser Ser Phe Leu Cys Ser Arg Gly Gly
1 10 15

Pro Leu Pro Xaa Asp Leu Ser Trp Asp Pro Met Ala Phe Phe Thr Gly $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Leu Trp Gly Pro Phe Thr Cys Val Ser Arg Val Leu Ser His His Cys 35 40 45

Phe Ser Thr Thr Gly Ser Leu Ser Ala Ile Gln Lys Met Thr Arg Val $50 \\ 60$

Arg Val Val Asp Asn Ser Ala Leu Gly Asn Ser Pro Tyr His Arg Ala 65 70 70 75 80

Pro Arg Cys Ile His Val Tyr Lys Lys Asn Gly Val Gly Lys Val Gly 85 90 95

Asp Gln Ile Leu Leu Ala Ile Lys Gly Gln Lys Lys Lys Ala Leu Ile $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$

Val Gly His Cys Met Pro Gly Pro Arg Met Thr Pro Arg Phe Asp Ser

Asn Asn Val Val Leu Ile Glu Asp Asn Gly Asn Pro Val Gly Thr Arg 130 135 140

Ile Lys Thr Pro Ile Pro Thr Ser Leu Arg Lys Arg Glu Gly Glu Tyr 145 150 155 160 Ser Lys Val Leu Ala Ile Ala Gln Asn Phe Val 165 170

<210> 397 <211> 171

<211> 1/1 <212> PRT

<213> Homo sapiens

<400> 397

Ala Arg Val Val Gln Pro Ala Ala Arg Ala Gly Met Trp Ala Gly Gly 1 10 15

Arg Ser Ser Cys Gln Ala Glu Val Leu Arg Ala Thr Arg Gly Gly Ala $20 \\ 25$

Ala Arg Gly Asn Ala Ala Pro Gly Arg Ala Leu Glu Met Val Pro Gly $35 \ \ 40 \ \ 45$

Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro Ala Cys Val Ala
50

Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe Gln Val Leu Ser
65
70
80

Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His Leu Val Pro Ala 100 \$105\$

Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly Phe Phe Ile Gln 115
Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser Phe Leu Ser Lys

Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val Ile Ile Ser Asp

Asn Ala Leu Thr Met Thr Ala Ser Thr Trp Arg

<210> 398

<211> 188 <212> PRT

<213> Homo sapiens

<400> 398

Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15 \hspace{1cm} 15 \hspace{1cm}$

Ala Cys Val Ala Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe $20 \\ 0 \\ 25$

Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr Ala Thr Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His 50

Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly

<400> 399
Val Asp Asn Asp Ser Phe Tyr Val Glu Met Ile Gln Asp Ser Thr Gln 15
Arg Thr Ala Asp Ile Pro Ala Leu Phe Leu Leu Gly Arg Asp Gly Tyr 25
Met Ile Arg Arg Ser Leu Glu Gln His Gly Leu Pro Trp Ala Ile Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro Thr Phe Glu Leu Gln Pro Pro Trp Thr Phe Trp
Pro Pro Trp Thr Phe Trp

<210> 400 <211> 187 <212> PRT

<213> Homo sapiens

<400> 400

Ile Ala Thr Ala Ala Leu Phe Phe Phe Phe Tyr Cys Gln Val Ala Gly 1 10 15

Phe Ile Gly Lys Gly Gln Ser Leu Arg Ser Trp Val Pro Gln Arg Leu 25 30 30

Leu Gly Leu Glu Pro Gln Leu Gln Pro Met Gln Gln Ser Arg Leu Leu $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Leu Pro Phe Leu Phe Phe Leu Leu Glu Gly Cys Ala Pro Ser Ser Leu

Gly Pro Gly Ala Ala Pro Gly Ser Gly His Ser Leu Gly Pro Pro Gly 65 70 75 80 Ser Pro Gly Ala Pro Gly Pro Gln Pro Ala Val Gly Pro Ser Ser Pro Cys Gln Pro Gly Pro Ser Pro Ser Ser Pro Ala Ala Ala Ala Ala Ser 100 105 110 Ser Gln Ser Ser Val Ala Ser Trp Pro Cys Thr Leu Arg Cys Ala Ala 115 120 125 Pro Ser Pro Asp Ala Ser Ala Leu Arg Pro Ala Ala Ser Pro Ala Ala 130 135 140 Thr Pro Ala Trp Ser Pro Gly Ser Gly Thr Ile Arg Val Leu Arg Pro Pro Ala Pro Ala Ala Pro Ala Thr Ala Ile Thr Asn Arg Gly Pro

Pro Arg Arg Arg Arg Asn Ala Arg Thr Ala

<210> 401 <211> 194

<212> PRT <213> Homo sapiens

<400> 401 Glu Arg Pro Pro Pro Arg Arg Thr Gly Thr Pro Val Ala Arg Pro Arg Gly Pro Pro Asp Pro Ala Val Ala Ala Gly Thr Ala Leu Arg Ala Lys 20 25 30Gln Phe Ala Arg Tyr Gly Ala Ala Ser Gly Val Val Pro Gly Ser Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ Trp Pro Ser Pro Glu Gln Leu Arg Glu Leu Glu Ala Glu Glu Arg Glu Trp Tyr Pro Ser Leu Ala Thr Met Gln Glu Ser Leu Arg Val Lys Gln 65 70 75 80 Leu Ala Glu Glu Gln Lys Arg Arg Glu Arg Glu Gln His Ile Ala Glu 85 90 95 Cys Met Ala Lys Met Pro Gln Met Ile Val Asn Trp Gln Gln Gln Gln 100 105 110 Arg Glu Asn Trp Glu Lys Ala Gln Ala Asp Lys Glu Arg Arg Ala Arg Leu Gln Ala Glu Ala Gln Glu Leu Leu Gly Tyr Gln Val Asp Pro Arg Ser Ala Arg Phe Gln Glu Leu Leu Gln Asp Leu Glu Lys Lys Glu Arg Asn Pro Gln Gly Gly Lys Thr Glu Thr Glu Glu Gly Gly Ala Thr Ala 165 170 175

Ala Leu Ala Ala Ala Val Ala Gln Asp Pro Ala Ala Ser Gly Ala Pro

185

190

Ser Ser

<210> 402

<211> 124 <212> PRT

<213> Homo sapiens

180

<400> 402

Met Gln Glu Ser Leu Arg Val Lys Gln Leu Ala Glu Glu Gln Lys Arg 1 10 15

Arg Glu Arg Glu Gln His Ile Ala Glu Cys Met Ala Lys Met Pro Gln 20 25 30

Met Ile Val Asn Trp Gln Gln Gln Gln Arg Glu Asn Trp Glu Lys Ala 35 40

Gln Ala Asp Lys Glu Arg Arg Ala Arg Leu Gln Ala Glu Ala Gln Glu 50 55 60

Leu Leu Gly Tyr Gln Val Asp Pro Arg Ser Ala Arg Phe Gln Glu Leu 65 70 80

Leu Gln Asp Leu Glu Lys Lys Glu Arg Lys Arg Leu Lys Glu Glu Lys 85 \$90\$

Gln Lys Arg Lys Lys Glu Ala Arg Ala Ala Ala Leu Ala Ala Val $100 \ 105 \ 110$

Ala Gln Asp Pro Ala Ala Ser Gly Ala Pro Ser Ser 115 120

<210> 403

<211> 113

<212> PRT <213> Homo sapiens

<400> 403

Tyr Gln Ser Leu Ala Glu Thr Gln Gln Lys Lys Glu Asn Phe Arg Pro 1 10 15

Ile Ser Leu Lys Asn Thr Asp Ala Lys Ile Leu Asn Lys Ile Leu Ala 25 Asn Gln Ile Gln Gln His Ile Lys Lys Leu Ile His Asn Asp Arg Val

35 40 45

Gly Phe Ile Pro Glu Met Gln Gly Trp Phe Asn Ile Cys Lys Ser Ile

Ile Ser Ile Asp Ala Glu Lys Ala Phe Asp Lys Ile Arg Gln Ser Phe 85 90 95

Met Leu Lys Thr Leu Asn Lys Leu Gly Ile His Gly Met Tyr Leu Gly 100 105 110

Arg

Asp Lys Ile

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<210> 404
<211> 101
<212> PRT
<213> Homo sapiens
<400> 404
Lys Lys Glu Asn Phe Arg Pro Ile Ser Leu Lys Asn Thr Asp Ala Lys
Ile Leu Asn Lys Ile Leu Ala Asn Gln Ile Gln Gln His Ile Lys Lys
Leu Ile His Asn Asp Arg Val Gly Phe Ile Pro Glu Met Gln Gly Trp
Phe Asn Ile Cys Lys Ser Ile Asn Ile Val His His Ile Asn Arg Thr
Lys Asp Lys Asn His Met Ile Ile Ser Ile Asp Ala Glu Lys Ala Phe 65 \phantom{0}70 \phantom{0}75
Asp Lys Ile Arg Gln Ser Phe Met Leu Lys Thr Leu Asn Lys Leu Gly
Ile His Gly Met Tyr
             100
<210> 405
<211> 11
<212> PRT
<213> Homo sapiens
<400> 405
Asp Ala Lys Ile Leu Asn Lys Ile Leu Ala Asn
 <210> 406
 <211> 10
 <212> PRT
 <213> Homo sapiens
 <400> 406
 Ile Gln Gln His Ile Lys Lys Leu Ile His
 <210> 407
 <211> 19
 <212> PRT
 <213> Homo sapiens
 <400> 407
 Lys Asp Lys Asn His Met Ile Ile Ser Ile Asp Ala Glu Lys Ala Phe
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<210> 408
<211> 10
<212> PRT
<213> Homo sapiens
<400> 408
Met Leu Lys Thr Leu Asn Lys Leu Gly Ile
<210> 409
<211> 10
<212> PRT
<213> Homo sapiens
<400> 409
Lys Lys Glu Asn Phe Arg Pro Ile Ser Leu
<210> 410
<211> 85
<212> PRT
<213> Homo sapiens
<400> 410
Trp Thr Met Phe Ile Asp Leu His Met Leu Asn Gln Pro Cys Ile Ser
Gly Met Lys Pro Thr Arg Ser Leu Trp Ile Ser Phe Leu Met Cys Cys
Trp Ile Trp Phe Ala Asn Ile Leu Leu Arg Ile Phe Ala Ser Val Phe
Phe Arg Asp Ile Gly Leu Lys Phe Ser Phe Phe Cys Cys Val Ser Ala
Arg Leu Trp Tyr Gln Asp Asp Ala Gly Leu Ile Asn Glu Leu Gly Arg 65 70 75 80
Ile Pro Ser Phe Tyr
<210> 411
<211> 72
<212> PRT
<213> Homo sapiens
<400> 411
Glu Arg Pro Glu Glu Gly Thr Glu Pro Ser Pro Ser Pro Val Ala Glu
Gln Ala Ser Val Ser Met Thr Pro Val Phe Arg Ala Trp Gly Leu Trp
Val Tyr Val Leu Pro Thr Gly Phe Pro Gly Pro Cys Cys Met Met Leu
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Leu Glu Leu Phe Pro Lys Glu Ser Val Pro Gln Ala Tyr Gln Gly Ile
Leu Leu Tyr Leu His Phe Gly Phe
<210> 412
<211> 123
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 412
Arg Gly Glu Val Pro His Gln Pro His Pro Thr Arg Arg Thr Val Val
Ser Gly Gln Ala Pro Trp Xaa Pro Gly Pro Xaa Ala Leu Gly Gln Xaa
Val Glu Thr Ala Ala Gly Met Gly Met Pro Leu Val Thr Val Thr Ala
Ala Thr Phe Pro Thr Leu Ser Cys Pro Pro Arg Ala Trp Pro Glu Val
Glu Ala Pro Glu Ala Pro Ala Leu Pro Val Val Pro Glu Leu Pro Glu
Val Pro Met Glu Met Pro Leu Val Leu Pro Pro Glu Leu Glu Leu Leu
Ser Leu Glu Ala Val His Arg Tyr Gln Xaa Gly Gly Thr Leu Met Gly
Trp Thr Arg Ala Glu Ala Ser Ala Asn Gly Ser
```

<210> 413

<211> 133

<211> 133

<213> Homo sapiens

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<400> 413
Met Val Leu Asp Pro Tyr Arg Ala Val Ala Leu Glu Leu Gln Ala Asn
Arg Glu Pro Asp Phe Ser Ser Leu Val Ser Pro Leu Ser Pro Arg Arg
Met Ala Ala Arg Val Phe Tyr Leu Leu Gly Glu Cys Met His Val
Cys Val Cys Met Trp Gly Arg Asp Thr Glu Thr Arg Gly Pro Tyr Arg
Asp Ser Pro Asp Leu Pro Ser Pro Arg Leu Leu Thr Ser Ala Leu Ser
Ala Thr Asp Ser Ser Arg Glu Thr Arg Lys Ala Ile Trp Ser Pro Pro
Asp Pro Ala Gly Ala Gln Ile Pro Leu Arg Leu Glu Ser Ile Tyr Lys
Ala Ala Arg Lys Pro Ala Thr Ser Ser Lys Pro Arg Arg Ala Ser Leu
Lys Lys Lys Lys
    130
<210> 414
<211> 11
<212> PRT
<213> Homo sapiens
<400> 414
Ala Phe Arg Asn Leu Pro Asn Leu Arg Ile Leu
<210> 415
<211> 13
<212> PRT
<213> Homo sapiens
<400> 415
Ala Phe Gln Gly Leu Phe His Leu Phe Glu Leu Arg Leu
<210> 416
<211> 206
 <212> PRT
<213> Homo sapiens
<220>
 <221> SITE
 <222> (3)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Asn Lys Xaa Ile Leu Glu Val Pro Ser Ala Arg Thr Thr Arg Ile Met
```

Gly Asp His Leu Asp Leu Leu Leu Gly Val Val Leu Met Ala Gly Pro Val Phe Gly Ile Pro Ser Cys Ser Phe Asp Gly Arg Ile Ala Phe Tyr 35 40 45Arg Phe Cys Asn Leu Thr Gln Val Pro Gln Val Leu Asn Thr Thr Glu Arg Leu Leu Ser Phe Asn Tyr Ile Arg Thr Val Thr Ala Ser Ser Phe Pro Phe Leu Glu Gln Leu Gln Leu Glu Leu Gly Ser Gln Tyr Thr Pro Leu Thr Ile Asp Lys Glu Ala Phe Arg Asn Leu Pro Asn Leu Arg Ile Leu Asp Leu Gly Ser Ser Lys Ile Tyr Phe Leu His Pro Asp Ala Phe Gln Gly Leu Phe His Leu Phe Glu Leu Arg Leu Tyr Phe Cys Gly Leu Ser Asp Ala Val Leu Lys Asp Gly Tyr Phe Arg Asn Leu Lys 145 150 155 160Ala Leu Thr Arg Leu Asp Leu Ser Lys Asn Gln Ile Arg Ser Leu Tyr Leu His Pro Ser Phe Gly Lys Leu Asn Ser Leu Lys Ser Ile Asp Phe Ser Ser Asn Gln Ile Phe Leu Val Cys Glu His Glu Leu Glu

<210> 417 <211> 261 <212> PRT

<213> Homo sapiens

<400> 417

Ala His Ala Ala Leu Gln Leu Ser Leu Arg Thr Cys Gly Pro Cys Ser Ser Pro Tyr Pro His Ala Gly Leu Ala Ala Leu Leu Thr His Met Trp Ala Leu Gln Leu Ser Leu Pro Thr Cys Gly Leu Ala Ala Leu Leu Thr His Met Arg Pro Cys Ser Ser Pro Tyr Pro His Ala Gly Leu Ala Ala Leu Leu Thr His Met Gly Pro Cys Arg Ser Pro Tyr Pro His Gly Gly 65 70 75 80 Leu Ala Ala Val Leu Thr His Met Arg Ala Leu Gln Leu Ser Leu Pro Thr Trp Gly Leu Ala Ala Leu Leu Thr His Met Arg Pro Cys Ser Ser 100 105 110Pro Tyr Pro His Ala Gly Leu Ala Cys Cys Trp Leu Trp Ser Leu Ser

115 120 125 Ser His Arg Ser Leu Gln Val Gln Ala Thr His Arg Leu Val Val Arg Thr Ile Lys Asp Arg Val Met Leu Lys Val Leu Pro Gln Thr Arg Arg 155 150 Arg Gly Pro Phe Leu Ser Ser Cys Arg Asn Asp Val Met Arg Asn Cys Val Pro Arg His Ala Val Leu Val Thr Thr Cys Val Phe Val Ser Phe Pro Thr His Cys Lys Val Gly Ile Thr Gly Pro Ile Thr Gln Val Lys Gln Lys Pro Gly Asn His Ser Ser Pro Cys Pro Val Ile Gln Leu Val 210 $\,$ 220 $\,$ Ala Lys Ala Glu Phe Glu Leu Met Leu Pro Ser Val Pro Lys Pro Val Tyr Leu Thr Leu Val Leu Ser Cys Trp Cys Leu Cys Asp Val Pro Cys 250 Leu Ser Val Ser Leu 260 <210> 418 <211> 17 <212> PRT

<400> 418

<213> Homo sapiens

Leu Ala Cys Cys Trp Leu Trp Ser Leu Ser Ser His Arg Ser Leu Gln

Val

<210> 419 <211> 59

<212> PRT <213> Homo sapiens

<400> 419

Glu Ile Gly Ser His Ser Val Ala Gln Ala Gly Leu Glu Leu Pro Gly

Ser Ser Asp Pro Pro Thr Ser Gly Ser Gln Ser Ala Gly Ile Thr Gly

Val Ser Gln Gly Thr Gln Pro Ser Val Asp Leu Cys Gln Glu Glu Pro

Ala Gly Ala Asp Gln Pro His Gly Ser Leu Gln

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<211> 67
<212> PRT
<213> Homo sapiens
<400> 420
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Thr Cys
Phe Gly Ala
<210> 421
<211> 90
<212> PRT
<213> Homo sapiens
<400> 421
Met Leu Val Val Ser Thr Val Ile Ile Val Phe Trp Glu Phe Ile Asn
Ser Thr Glu Gly Ser Phe Leu Trp Ile Tyr His Ser Lys Asn Pro Glu
Val Asp Asp Ser Ser Ala Gln Lys Gly Trp Trp Phe Leu Ser Trp Phe 35 40 45
Asn Asn Gly Ile His Asn Tyr Gln Gln Gly Glu Glu Asp Ile Asp Lys
Glu Lys Gly Arg Glu Glu Thr Lys Gly Arg Lys Met Thr Gln Gln Ser
Phe Gly Tyr Gly Thr Gly Leu Ile Gln Thr
                 85
<210> 422
<211> 18
<212> PRT
<213> Homo sapiens
<400> 422
Phe Pro Gly Arg Thr His Ala Ser Gly Asn Val Lys Gly Lys Val Ile
```

<210> 423 <211> 106 <212> PRT <213> Homo sapiens

Leu Ser

<210> 424 <211> 236 <212> PRT <213> Homo sapiens

<220> <221> SITE <222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 424 Met Gln Ser Pro Leu Val Glu Cys Pro Pro Pro Ser Ile His Tyr Trp $1 \ 5 \ 10 \ 15$

Pro Ser Val Pro Ala Gly Ala Gln Gly Ala Cys Ser Pro Met Phe His 20 25 30 Ala Ala Gly Trp Ser Arg Ser Gln Pro Asn Gly Glu Ile Pro Ala Ser 40 45

35 40 45

Ser Xaa Gly His Leu Ser Ile Gln Arg Ala Ala Leu Val Val Leu Glu
50 50 60

Asn Tyr Tyr Lys Asp Phe Thr Ile Tyr Asn Pro Asn Leu Leu Thr Ala 65 70 80

Ser Lys Phe Arg Ala Ala Lys His Met Ala Gly Leu Lys Val Tyr Asn 85 90 95

Val Asp Gly Pro Ser Asn Asn Ala Thr Gly Gln Ser Arg Ala Met Ile 100 105 110

Ala Ala Ala Arg Arg Arg Asp Ser Ser His Asn Glu Leu Tyr Tyr 115 120 125

Glu Glu Ala Glu His Glu Arg Arg Val Lys Lys Arg Lys Ala Arg Leu 130 135 140

Val Val Ala Val Glu Glu Ala Phe Ile His Ile Gln Arg Leu Gln Ala 145 \$150\$

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Glu Glu Gln Gln Lys Ala Pro Gly Glu Val Met Asp Pro Arg Glu Ala
Ala Gln Ala Ile Phe Pro Ser Met Ala Arg Ala Leu Gln Lys Tyr Leu
Arg Ile Thr Arg Gln Gln Asn Tyr His Ser Met Glu Ser Ile Leu Gln
Ala Pro Gly Leu Leu His His Gln Arg His Asp Pro Gln Gly Leu Pro
Arg Thr Val Pro Gln Cys Gly Pro His Pro Ala Ile
<210> 425
<211> 23
<212> PRT
<213> Homo sapiens
<400> 425
Leu Ser Ile Gln Arg Ala Ala Leu Val Val Leu Glu Asn Tyr Tyr Lys
Asp Phe Thr Ile Tyr Asn Pro
              20
<210> 426
<211> 15
<212> PRT
<213> Homo sapiens
<400> 426
Asp Ser Ser His Asn Glu Leu Tyr Tyr Glu Glu Ala Glu His Glu
<210> 427
<211> 18
<212> PRT
 <213> Homo sapiens
 Phe Pro Ser Met Ala Arg Ala Leu Gln Lys Tyr Leu Arg Ile Thr Arg
 Gln Gln
 <210> 428
 <211> 140
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (117)
```

<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 428
Met Ala Phe Lys Leu Leu Ile Leu Leu Ile Gly Thr Trp Ala Leu Phe
Phe Arg Lys Arg Arg Ala Asp Met Pro Arg Val Phe Val Phe Arg Ala
Leu Leu Leu Val Leu Ile Phe Leu Phe Cys Gly Phe Pro Ile Gly Phe
Phe Thr Gly Ser Ala Phe Trp Thr Leu Gly Asn Arg Asn Tyr Gln Gly 50 60
Ile Val Gln Tyr Ala Val Ser Pro Cys Gly Met Pro Ser Ser Phe His 65 70 75 80
Pro Leu Leu Ala Ile Arg Pro Cys Trp Ser Ser Gly Ser Leu Gln Pro
Asn Val Pro Arg Cys Arg Leu Val Pro Leu Pro Thr Glu Trp Gly Asn
Pro Arg Phe Gln Xaa Gly Thr Pro Glu Tyr Pro Ala Ser Ser Ile Gly
Gly Pro Arg Lys Leu Leu Gln Arg Phe His His Leu
```

<210> 429 <211> 49

<212> PRT <213> Homo sapiens

<400> 429

Met Gln Ser Pro Leu Trp Met Pro Ser Ser Ser Ser Ile Thr Trp Pro Ser Ser Cys Trp Ser Ser Gly Ser Cys Ser Pro Cys Ser Arg Cys Arg Trp Ser Arg Ser Thr Asp Gly Glu Ser Arg Phe Tyr Ser Leu Gly His $\frac{35}{40}$

Leu

<210> 430 <211> 303 <212> PRT

<213> Homo sapiens

<400> 430

Met Gln Ser Pro Leu Trp Met Pro Ser Ser Ser Ser Ile Thr Trp Pro Ser Ser Cys Trp Ser Ser Gly Ser Cys Ser Pro Cys Ser Arg Cys Arg Trp Ser Arg Ser Thr Asp Gly Glu Ser Arg Phe Tyr Ser Leu Gly His $\frac{35}{40}$

Leu Ser Ile Gln Arg Ala Ala Leu Val Val Leu Glu Asn Tyr Tyr Lys

50 55 60

Pho Thr Tle Tyr Asn Pro Asn Leu Jeu Thr Ala

 Asp
 Phe
 Thr
 Ile
 Tyr
 Asn
 Pro
 Asn
 Leu
 Leu
 Tyr
 Ala
 Ser
 Lys
 Phe
 Ang
 Ala
 Ser
 Lys
 Pro
 Ang
 Ala
 Tyr
 Asn
 Val
 Asp
 Gly
 Pro

 Ser
 Asn
 Ala
 Thr
 Gly
 Gln
 Ser
 Ang
 Ala
 Met
 Ile
 Ala
 Ala

Gly Ile Val Phe Val Leu Lys Cys Leu Asp Phe Ser Leu Val Val Asn 265

Val Lys Lys Ile Pro Phe Ile Ile Leu Ser Glu Glu Phe Ile Asp Pro 275
280
285

Lys Ser His Lys Phe Val Leu Arg Leu Gln Ser Glu Thr Ser Val

Val Asp Ala Leu Leu Phe Ile His Tyr Leu Ala Ile Val Leu Leu Glu 50 55 60

<210> 431

<211> 92 <212> PRT

<213> Homo sapiens

 $<\!400>431$ Met Pro Arg Val Phe Val Phe Arg Ala Leu Leu Leu Val Leu Ile Phe 15
Leu Phe Val Val Ser Tyr Trp Leu Phe Tyr Gly Val Arg Ile Leu Asp 25
Ser Arg Asp Arg Asn Tyr Gln Gly Ile Val Gln Tyr Ala Val Ser Leu 45
40
45

Leu Arg Gln Leu Gln Pro Met Phe Thr Leu Gln Val Val Arg Ser Thr Asp Gly Glu Ser Arg Phe Tyr Ser Leu Gly His Leu

<210> 432

<211> 114 <212> PRT

<213> Homo sapiens

<400> 432

Met Ala Phe Lys Leu Leu Ile Leu Leu Ile Gly Thr Trp Ala Leu Phe

Phe Arg Lys Arg Arg Ala Asp Met Pro Arg Val Phe Val Phe Arg Ala

Leu Leu Val Leu Ile Phe Leu Phe Val Val Ser Tyr Trp Leu Phe Tyr Gly Val Arg Ile Leu Asp Ser Arg Asp Arg Asn Tyr Gln Gly Ile

Val Gln Tyr Ala Val Ser Leu Val Asp Ala Leu Leu Phe Ile His Tyr

Leu Ala Ile Val Leu Leu Glu Leu Arg Gln Leu Gln Pro Met Phe Thr

Leu Gln Val Val Arg Ser Thr Asp Gly Glu Ser Arg Phe Tyr Ser Leu

Gly His

<210> 433

<211> 37 <212> PRT

<213> Homo sapiens

<400> 433 Met Gly Leu Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly

Cys Cys Ala Leu Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg

Ser Pro Arg Thr Leu 35

<210> 434 <211> 20

<212> PRT

<213> Homo sapiens

<400> 434

Ile Tyr Gly Lys Thr Gly Gln Pro Asp Lys Ile Tyr Val Glu Leu His 1

```
Gln Asn Ser Pro
             20
<210> 435
<211> 16
<212> PRT
<213> Homo sapiens
<400> 435
Phe Leu Glu Pro Leu Ser Gly Leu Tyr Thr Cys Thr Leu Ser Tyr Lys
                                      10
<210> 436
<211> 16
<212> PRT
<213> Homo sapiens
<400> 436
Leu Gln Val Val Arg Leu Asp Ser Cys Arg Pro Gly Phe Gly Lys Asn
<210> 437
<211> 12
<212> PRT
<213> Homo sapiens
<400> 437
Cys Val Ser Val Leu Thr Tyr Gly Ala Lys Ser Cys
<210> 438
<211> 26
<212> PRT
<213> Homo sapiens
<400> 438
Lys Asn Asn Trp Trp Gln Gly Val Val Val Leu Ala Cys Asn Pro Ser 1 10 15
Thr Leu Gly Asp Arg Gly Ser Trp Ile Thr
 <210> 439
 <211> 17
 <212> PRT
 <213> Homo sapiens
 <400> 439
 Gly Gln Glu Phe Glu Thr Arg Leu Thr Asn Ile Val Lys Leu Arg Leu
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195

Tyr <210> 440 <211> 24 <212> PRT <213> Homo sapiens <400> 440 Ser Cys Leu Gly Leu Pro Lys Cys Trp Asp Tyr Arg Gln Glu Pro Pro 1 5 His Pro Ala Thr Ser Tyr Phe Leu 20 <210> 441 <211> 308 <212> PRT <213> Homo sapiens <400> 441 Pro Ala Lys Gly Glu Gly Cys Arg Arg Leu His Asp His Pro His Ile 1Trp Arg Leu Leu Trp Ala His Ser Asp Pro Asp Pro Leu Pro Thr Gln $20 \hspace{0.2in} 25 \hspace{0.2in}$ Pro Arg Ala Glu Gln Gly Glu Thr Glu Phe Cys Val Pro Val Gly Pro Leu Cys His Asp Trp His Pro Leu Pro Val Asp Val Leu Ala Gln Leu Gln Leu Ser His Ile Leu Pro Trp Gly Gln Pro Ala Pro Ser Arg His Gln His Leu Leu Leu Gly Ser Leu Arg Ala Tyr Leu Gly Gly Asn Ile Gln Cys Pro Ala Lys Lys Gly Lys Leu Asp Met Val His Ile Gln 100 105 110Asn Ala Thr Leu Ala Gly Gly Val Ala Val Gly Thr Ala Ala Glu Met Met Leu Met Pro Tyr Gly Ala Leu Ile Ile Gly Phe Val Cys Gly Ile Ile Ser Thr Leu Gly Phe Val Tyr Leu Thr Pro Phe Leu Glu Ser Arg Leu His Ile Gln Asp Thr Cys Gly Ile Asn Asn Leu His Gly Ile Pro $165 \hspace{1cm} 175 \hspace{1cm}$ Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His Ser Phe Asp Phe Gln

Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln Gly Lys Phe Gln IIe 210

Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu Met Gly Gly IIe IIe 225

Val Gly Leu IIe Leu Arg Leu Pro Phe Trp Gly Gln Pro Ser Asp Glu 255

Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met Pro Glu Gly Asn Ser 260

Thr Val Tyr IIe Pro Glu Asp Pro Thr Phe Lys Pro Ser Gly Fro Ser Val 270

Val Pro Ser Val Pro Met Val Ser Pro Leu Fro Met Ala Ser Ser Val 200

Pro Leu Val Pro

<210> 442 <211> 145 <212> PRT <213> Homo sapiens

<400> 442
Met Thr Phe Phe Gln Val Thr Leu Phe Ala Val Asn Glu Phe Ile Leu
1
1
10
15
Leu Asn Leu Leu Lys Val Lys Asp Ala Gly Gly Ser Met Thr Ile His
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Thr Phe Gly Ala Tyr Phe Gly Leu Thr Val Thr Arg Ile Leu Tyr Arg 35 40 45

Arg Asn Leu Glu Gln Ser Lys Glu Arg Gln Asn Ser Val Tyr Gln Ser $50 \\ 0 \\ 60$

Asp Leu Phe Ala Met Ile Gly Thr Leu Phe Leu Trp Met Tyr Trp Pro 65 70 80 Ser Phe Asn Ser Ala Ile Ser Tyr His Gly Asp Ser Gln His Arg Ala 90 95

Ala Ile Asn Thr Tyr Cys Ser Leu Ala Ala Cys Val Leu Thr Ser Val 100 \$100\$

Ala Ile Ser Ser Ala Leu His Lys Lys Gly Lys Leu Asp Met Val His $115 \\ 120 \\ 120 \\ 125$

Ile Gln Asn Ala Thr Leu Ala Gly Gly Val Ala Val Gly Thr Ala Ala $130 \\ 135 \\ 140 \\$

Glu 145

<210> 443 <211> 108

<212> PRT <213> Homo sapiens

```
<400> 443
Pro Arg Val Arg Thr Arg Ala Pro Val Val Pro Pro Ala Gly His Arg 1
Ala Leu Ser Pro Ala Gly Val Leu Leu Ala Val Pro Ala Met Leu Ser 25
Leu Asp Phe Leu Asp Asp Val Arg Arg Met Asn Lys Arg Gln Val Ser 45
Leu Ser Val Leu Phe Phe Ser Trp Leu Phe Leu Ser Leu Arg Gly Cys 50
Cys Cys Gly Ala Arg Arg Thr Pro Gly Phe Trp Cys Glu Gly Leu Ser 65
Trp Ser Asp Thr Arg Val Ile Arg Phe Leu Trp Arg Leu Trp Pro Glu Ala Ala Leu Ser Ala Ser Leu Phe Leu Thr Pro Asn
Ala Ala Leu Ser Ala Ser Leu Phe Leu Thr Pro Asn
```

<210> 444 <211> 84

<212> PRT <213> Homo sapiens

<400> 444

Met Cys Val Tyr Ile Tyr Val Tyr Thr Cys Met Cys Val Tyr Ile Tyr 15

Val Tyr Ile Cys Ile Cys Val Tyr Ile His Val Tyr Thr Cys Ile Cys Val Tyr Ile His Val Tyr Thr Cys Ile Cys Val Tyr Ile His Val Tyr Thr Cys Val Cys Val Tyr Ile Tyr Val Tyr 45

Thr Cys Met Cys Val Tyr Ile Cys Ile Tyr Val Tyr Ile Tyr Ile Cys Val Cys Val Ser Val Ser Val Tyr Ile Tyr Asn Arg Ile Ile Tyr Ile Leu Leu 65
Val Cys Val Ser Val Tyr Ile Tyr Asn Arg Ile Ile Tyr Ile Leu Leu 65

<210> 445 <211> 16 <212> PRT <213> Homo sapiens

Ala Leu Ser Leu

 $<\!400\!>$ 445 His Ala Ser Ala Trp Asn Leu Ile Leu Leu Thr Val Phe Thr Leu Ser 1 10 15

```
<212> PRT
<213> Homo sapiens
<400> 446
Val Tyr Ala Ala Leu Gly Ala Gly Val Phe Thr Leu Phe Leu Ala Leu
Asp Thr Gln Leu Leu Met Gly Asn
             20
<210> 447
<211> 18
<212> PRT
<213> Homo sapiens
<400> 447
Glu Glu Tyr Ile Phe Gly Ala Leu Asn Ile Tyr Leu Asp Ile Ile Tyr
Ile Phe
<210> 448
<211> 26
<212> PRT
<213> Homo sapiens
<400> 448
Trp Asn Leu Ile Leu Leu Thr Val Phe Thr Leu Ser Met Ala Tyr Leu
Thr Gly Met Leu Ser Ser Tyr Tyr Asn Thr
<210> 449
<211> 138
<212> PRT
<213> Homo sapiens
 <400> 449
Met Ala Tyr Leu Thr Gly Met Leu Ser Ser Tyr Tyr Asn Thr Thr Ser
 Val Leu Leu Cys Leu Gly Ile Thr Ala Leu Val Cys Leu Ser Val Thr \frac{20}{20}
 Val Phe Ser Phe Gln Thr Lys Phe Asp Phe Thr Ser Cys Gln Gly Val
 Leu Phe Val Leu Leu Met Thr Leu Phe Phe Ser Gly Leu Ile Leu Ala
 Ile Leu Leu Pro Phe Gln Tyr Val Pro Trp Leu His Ala Val Tyr Ala
 Ala Leu Gly Ala Gly Val Phe Thr Leu Phe Leu Ala Leu Asp Thr Gln 85 \ \ 90 \ \ \ 95
 Leu Leu Met Gly Asn Arg Arg His Ser Leu Ser Pro Glu Glu Tyr Ile
             100
```

Phe Gly Ala Leu Asn Ile Tyr Leu Asp Ile Ile Tyr Ile Phe Thr Phe 115 120 125

Phe Leu Gln Leu Phe Gly Thr Asn Arg Glu 130 135

<210> 450

<211> 11

<212> PRT <213> Homo sapiens

<400> 450

Thr Leu Ser Leu Leu Val Ser Leu His Thr Val

<210> 451

<211> 241 <212> PRT

<213> Homo sapiens

<400> 451

Met Ser Ser Ser Gly Thr Ser Asp Ala Ser Pro Ser Gly Ser Pro Val 1 1 15

Leu Ala Ser Tyr Lys Pro Ala Pro Pro Lys Asp Lys Leu Pro Glu Thr 20 Pro Arg Arg Met Lys Lys Ser Leu Ser Ala Pro Leu His Pro Glu 45 45 45

Phe Glu Glu Val Tyr Arg Phe Gly Ala Glu Ser Arg Lys Leu Leu Leu 50 55 60

Arg Glu Pro Val Asp Ala Met Pro Asp Pro Thr Pro Phe Leu Leu Ala 65 70 75 80

Arg Glu Ser Ala Glu Val His Leu Ile Lys Glu Arg Pro Leu Val Ile 85 90 95

Pro Pro Ile Ala Ser Asp Arg Ser Gly Glu Gln His Ser Pro Ala Arg 100 Glu Lys Pro His Lys Ala His Val Gly Val Ala His Arg Ile His His

115 120 125

Ala Thr Pro Pro Gln Pro Ala Arg Gly Glu Asp Pro Gly Gly Arg Pro
130 140

Gly Glu Arg Arg Gln Gly Gly Glu Glu Ala Leu Arg Asp Gly Gln Asn

Cys Val Lys Pro Ala Val Pro His Pro Ala Leu Ser Met His Cys Glu 165 170 175

His His Trp Glu Ile Ser Ala Thr Pro Phe Leu Phe Asn Pro Met His

Ala Lys His Phe Ser His Leu Pro Thr His Ser Pro Ser Ala Ser Leu 195 200 205

Ala Leu Phe Phe Thr Pro Lys Tyr Asp Arg Val Pro Ala Ala Glu Tyr

210 215 220 Val Phe Pro Asn Cys Cys Gly Gln Thr Pro Val Cys Arg Ile Ala Cys Phe <210> 452 <211> 85 <212> PRT <213> Homo sapiens <400> 452 Met Ser Ser Ser Gly Thr Ser Asp Ala Ser Pro Ser Gly Ser Pro Val Pro Arg Arg Arg Met Lys Lys Ser Leu Ser Ala Pro Leu His Pro Glu Phe Glu Glu Val Tyr Arg Phe Gly Ala Glu Ser Arg Lys Leu Leu Leu Arg Glu Pro Val Asp Ala Met Pro Asp Pro Thr Pro Phe Leu Leu Ala Arg Glu Ser Ala Glu <210> 453 <211> 63 <212> PRT <213> Homo sapiens <400> 453 Val His Leu Ile Lys Glu Arg Pro Leu Val Ile Pro Pro Ile Ala Ser Asp Arg Ser Gly Glu Gln His Ser Pro Ala Arg Glu Lys Pro His Lys Ala His Val Gly Val Ala His Arg Ile His His Ala Thr Pro Pro Gln Pro Ala Arg Gly Glu Asp Pro Gly Gly Arg Pro Gly Glu Arg Arg 50 <210> 454 <211> 93 <212> PRT <213> Homo sapiens <400> 454 Gln Gly Gly Glu Glu Ala Leu Arg Asp Gly Gln Asn Cys Val Lys Pro

Ala Val Pro His Pro Ala Leu Ser Met His Cys Glu His His Trp Glu

20 25 Ile Ser Ala Thr Pro Phe Leu Phe Asn Pro Met His Ala Lys His Phe

Ser His Leu Pro Thr His Ser Pro Ser Ala Ser Leu Ala Leu Phe Phe

Thr Pro Lys Tyr Asp Arg Val Pro Ala Ala Glu Tyr Val Phe Pro Asn $65 \ 70 \ 75 \ 80$

Cys Cys Gly Gln Thr Pro Val Cys Arg Ile Ala Cys Phe

<210> 455

<211> 59 <212> PRT

<213> Homo sapiens

<400> 455

Lys Arg Ala Ser Gln Pro Pro Cys Thr Arg Asn Leu Lys Arg Ser Thr

Asp Ser Gly Gln Arg Ala Gly Asn Ser Phe Cys Gly Asn Gln Trp Met

Leu Cys Pro Thr Pro Pro His Phe Cys Trp Leu Gly Ser Pro Pro Arg

Ser Thr Ser Ser Lys Arg Gly Pro Ser Ser Ser

<210> 456

<211> 65

<212> PRT

<213> Homo sapiens

<400> 456 Pro Pro Ser Pro Pro Thr Glu Ala Ala Ser Ser Thr Ala Arg Pro Ala

Lys Ser Arg Thr Arg Pro Thr Ser Gly Trp His Ile Gly Ser Thr Thr Pro Pro Arg Arg Ser Gln Pro Glu Val Lys Thr Leu Ala Val Asp Gln

Val Asn Gly Gly Lys Val Val Arg Lys His Ser Gly Thr Asp Arg Thr

Val 65

<210> 457

<211> 148

<212> PRT

<213> Homo sapiens

<400> 457

Met Trp Asn Pro Asn Ala Gly Gln Pro Gly Pro Asn Pro Tyr Pro Pro

<210> 458 <211> 58 <212> PRT <213> Homo sapiens

145

 $<\!400>458$ Arg Val Gly Pro Asp Ala Trp Ala Asp Ala Trp Glu Gln Ala Gln Ala 15
Ala Val Glu Arg Leu Glu Asp Thr Pro Lys His Val Glu Ser Gln Cys 25
Arg Ala Ala Arg Ala Lys Ser Ile Ser Pro Gln Tyr Trp Val Pro Trp 45
40 $\frac{40}{10}$

Arg Phe Gln Ser Cys Pro Pro Thr Thr Tyr

<210> 459 <211> 84

<212> PRT <213> Homo sapiens

<400> 459 Ser Thr Leu Ser Pro Arg Pro Leu Ser Ser Ser Pro Arg Ser Ser Pro $\frac{1}{10}$ 15

Trp Gln Ser Ser Phe Pro Pro Arg Trp Ala Pro Ser Ser Cys Ala Thr $20 \ \ 25 \ \ 30$

Ala Arg Val Ser Arg Met Pro Thr Val Gly Ser Leu Pro Ser Ser Ile $35 \hspace{0.25cm} 40 \hspace{0.25cm} 45$

Pro Thr Ala Cys Pro Trp Asn Pro Ser Cys Glu Ser Leu Gly Ser Trp 50 60 His Gly Trp Thr Ser Ser Asp Ser Arg Glu Glu Asp Ala Glu Glu Asn

Glu Glu Ser Ser

<210> 460 <211> 86 <212> PRT

<213> Homo sapiens

<400> 460

Met Pro Gly Ser Gln Gly Gln Ile His Ile Pro Pro Ile Leu Gly Ala 1 15

Leu Glu Val Pro Ile Leu Pro Thr His His Leu Leu Ile His Pro Phe 20 25 30 Pro Gln Ala Pro Val Leu Leu Pro Gln Glu Leu Pro Met Ala Ile Gln

Leu Ser Pro Gln Val Gly Pro Leu Ile Leu Cys His Ser Gln Gly Ile

Gln Asp Ala Asn Arg Trp Val Pro Thr Leu Leu His Thr His Arg Leu 65 70 75

Pro Leu Glu Ser Leu Leu 85

<210> 461

<211> 65 <212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (56)

 $\stackrel{-}{<}223>$ Xaa equals any of the naturally occurring L-amino acids

<400> 461

Met Ala Ser Ile Pro Pro Leu Pro Pro Pro Leu Pro Ala Val Ile Leu 1 5 5 10 10 15

Thr Glu Tyr Arg Pro Trp Thr Leu Pro Ser Ser Leu Thr Ser Ser Ala $20 \\ 25 \\ 25$

Leu Pro Ser Ser Phe Arg Cys His Val Val Leu Gly Glu Cys Ser Pro $35 \ \ \, 40 \ \ \, 45$

Cys Ala Pro His Pro Leu Pro Xaa Pro Glu Pro His Pro Ala Val Glu 50 60

Pro 65

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<211> 147
<212> PRT
```

<400> 462

Pro Arg His Thr Tyr Trp Gly Ile Trp Leu Val Pro Ala Ala Met Ala 1 10 15

Ser Pro His Ser His Pro Ala Gln Gly Val Leu Gln Pro Pro Gly Pro $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Gln Pro Arg Trp Glu Asp Arg Val Ala Leu Gly Thr Arg Gly Arg Ser 35 40 45

Pro Gly Ala Tyr Leu Thr Glu Ser Ala Pro Gln Gln Ala Ser Thr Thr 50 60

Pro Gly Pro Pro Thr Cys His Gly Lys Val Gly Ser Glu Trp Ala Trp 65 75 80

Leu Gly Ala Ala Pro Gly Pro Leu Pro Thr His Pro Ser His Tyr Ala $85 \hspace{1cm} 90 \hspace{1cm} 95$

Ile Arg Val Pro Ser Asn Ile Cys Ser Cys Pro Gly Ala Ser Ser Ala 100 Pro Ala Leu Arg Gly Val Val Arg Gln Pro Pro Gly Pro Gln Asn Pro 115 120 Pro Pro Gly Pro Ile Asn Pro 125 Pro

2120 123 125 126 Arg Cly Arg Arg Cly Thr Arg Ala Ser Pro Val Cly Ser Lei

Arg Gln Gly Gly Arg Arg Gly Thr Arg Ala Ser Pro Val Gly Ser Leu 130 $\,$ 140 $\,$

Phe Cys Val

<210> 463

<400> 463

Met Phe Ala Val Leu Pro Ala Val Glu Gly Arg Ala Thr Pro His Gln
1 10 15

Asp Arg Thr Cys Tyr Pro Ser Arg Ser Arg Pro Trp Pro Ser Gln Pro $20 \\ 20 \\ 30$

Gly Pro Pro Ala Pro Ala Val Tyr Arg Arg Met Ala Leu Pro Pro Arg 65 75 80 Ala Ala Gly Ser Tyr Leu Asp Arg Lys Cys Pro His Pro Leu Pro Gly 95 95 95

Ala Arg Leu Cys Pro Gly Leu Pro Leu 100 105

<213> Homo sapiens

<211> 105 <212> PRT

<213> Homo sapiens

<210> 465 <211> 186 <212> PRT

Leu Ser Leu Cys Cys Leu Gly Thr Pro Asp Arg Gly Val Arg Val Cys

Pro Ser Val Thr Phe Tyr Ser Pro Arg Val Glu Glu Arg Lys Arg Gly $165 \,$ $170 \,$ $175 \,$

Lys Ser Lys Gly Val Gln Thr Pro Pro Gln 180 185

<210> 466

<211> 100 <212> PRT

<213> Homo sapiens

<400> 466

Met Ala Thr Cys Arg Val Lys Ala Gly Pro Cys Ser Gly Ala Gly Arg

Gln Pro Gln Gln Phe Thr Asp Ala Trp Leu Phe Leu Pro Glu Gln Pro 20 25 30

Ala Ala Thr Trp Thr Gly Asn Val Leu Ile Pro Ser Leu Gly Pro Gly $35 \ \ \, 40 \ \ \,$

Ser Ala Leu Ala Phe Leu Cys Glu Pro Leu Leu Ser Leu Cys Cys Leu 50 Gly Thr Pro Asp Arg Gly Val Arg Val Cys Pro Ser Val Thr Phe Tyr 70 80

65 70 75 80

Ser Pro Arg Val Glu Glu Arg Lys Arg Gly Lys Ser Lys Gly Val Gln

Thr Pro Pro Gln

<210> 467 <211> 244

<212> PRT <213> Homo sapiens

<400> 467

(400) 46/ Met Lys Trp Phe Ser Thr Gln Pro Leu Trp Leu Asn Thr Lys Gln Arg 1 10 15

Ser His Arg Arg Gly Pro Gly Pro Pro Pro Ala Pro Leu Ser Gly Val 20 25 30

Leu Gly Ser Arg Gly Leu Pro His His Pro Ser Gln Gly Trp Gly Arg

Leu Gly Ser Arg Gly Leu Pro His His Pro Ser Gln Gly Trp Gly Arg 35 40 45

Ala Gly Pro Arg Ala Gly Ala Asn Val Ala Trp Asn Ser Asn Cys Ile
50
60

Val Arg Trp Val Gly Gly Gln Trp Ala Arg Gly Cys Ser Gln Pro Gly 65 75

Pro Phe Thr Thr Asn Leu Ala Met Thr Cys Gly Gly Pro Trp Gly Ser 85 90 95

Gly Cys Leu Leu Gly Ser Thr Leu Ser Glu Val Ser Pro Trp Ala Pro

 Pro
 Ser
 Cys
 Pro
 Gln
 Gly
 His
 Pro
 Val
 Leu
 Pro
 Trp
 Ala
 Pro
 Leu
 Pro
 Pro
 Leu
 Pro
 Pro
 Leu
 Pro
 Pro</th

<210> 468

<211> 165 <212> PRT

<213> Homo sapiens

<400> 468
Lys Val Thr Asp Gly His Thr Arg Thr Pro Arg Ser Gly Val Pro Arg
15
Gln His Lys Glu Arg Arg Gly Ser Gln Arg Lys Ala Arg Ala Glu Pro
20
Gly Pro Arg Glu Gly Met Arg Thr Phe Pro Val Gln Val Ala Ala Gly
45
Cys Ser Gly Arg Lys Ser His Ala Ser Val Asn Cys Trp Gly Trp Arg
55
Pro Ala Pro Leu Gln Gly Pro Ala Leu Thr Leu His Val Ala Ile Gln
76
Leu Pro Ser Gly Cys Pro Trp Pro Trp His Arg His Arg Ala Ser Arg
85
Ala Gly Leu Ala Gly Pro Gly Pro Gly Pro Gly Gly Val Ala Arg Pro
110
Ile Leu Met Trp Gly Gly Ser Ala Leu His Gly Gly Lys His Ser Lys
115
His Arg Thr Leu Lys Pro Lys Ala Pro Leu Gly Ser Leu Ala Pro Thr
130
Ser Trp Gly Gly Asp Arg Arg His Arg Asp Leu Ser Pro Lys Pro Ala
150

<210> 472 <211> 209 <212> PRT

<213> Homo sapiens

<400> 472

Pro Arg Val Arg Ala Leu Leu Phe Ala Arg Ser Leu Arg Leu Cys Arg

Trp Gly Ala Lys Arg Leu Gly Val Ala Ser Thr Glu Ala Gln Arg Gly

Val Ser Phe Lys Leu Glu Glu Lys Thr Ala His Ser Ser Leu Ala Leu

Phe Arg Asp Asp Thr Gly Val Lys Tyr Gly Leu Val Gly Leu Glu Pro
50 55 60

Thr Lys Val Ala Leu Asn Val Glu Arg Phe Arg Glu Trp Ala Val Val

Leu Ala Asp Thr Ala Val Thr Ser Gly Arg His Tyr Trp Glu Val Thr Val Lys Arg Ser Gln Gln Phe Arg Ile Gly Val Ala Asp Val Asp Met

Ser Arg Asp Ser Cys Ile Gly Val Asp Asp Arg Ser Trp Val Phe Thr $115 \\ 120 \\ 125$

Met Pro Ser Ala Ser Gly Thr Pro Cys Trp Pro Thr Arg Lys Pro Gln

Leu Arg Val Leu Gly Ser Gln Glu Val Gly Leu Leu Leu Glu Tyr Glu

Ala Gln Lys Leu Ser Leu Val Asp Val Ser Gln Val Ser Val Val His

Thr Leu Gln Thr Asp Phe Arg Gly Pro Val Val Pro Ala Phe Ala Leu Trp Asp Gly Glu Leu Leu Thr His Ser Gly Leu Glu Val Pro Glu Gly

Leu

<210> 473

<211> 98 <212> PRT

<213> Homo sapiens

<400> 473

Met Ser Arg Asp Ser Cys Ile Gly Val Asp Asp Arg Ser Trp Val Phe Thr Met Pro Ser Ala Ser Gly Thr Pro Cys Trp Pro Thr Arg Lys Pro

Gln Leu Arg Val Leu Gly Ser Gln Glu Val Gly Leu Leu Leu Glu Tyr

Glu Ala Gln Lys Leu Ser Leu Val Asp Val Ser Gln Val Ser Val Val

His Thr Leu Gln Thr Asp Phe Arg Gly Pro Val Val Pro Ala Phe Ala Leu Trp Asp Gly Glu Leu Leu Thr His Ser Gly Leu Glu Val Pro Glu Gly Leu <210> 474 <211> 1913 <212> DNA <213> Homo sapiens <400> 474 gcacgagcgg cacgagcgga tectcacacg actgtgatec gattetttec ageggettet 60 120 quaaccaage gggtettace eceggteete egegteteea gteetegeae etggaaceee aacgtccccg agagtccccg aatccccgct cccaggctac ctaagaggat gagcggtgct 180 cegacggccg gggcagccct gatgctctgc gccgccaccg ccgtgctact gagcgctcag 240 300 ggcggacccg tgcagtccaa gtcgccgcgc tttgcgtcct gggacgagat gaatgtcctg gegeacggac teetgeaget eggeeagggg etgegegaac aegeggageg caccegeagt cagetgageg egetggageg gegeetgage gegtgegggt eegeetgtea gggaacegag gggteeaceg accteeegtt ageeectgag ageegggtgg accetgaggt eetteacage 420 480 ctgcagacac aactcaaggc tcagaacagc aggatccagc aactcttcca caaggtggcc 540 cagcagcagc ggcacctgga gaagcagcac ctgcgaattc agcatctgca aagccagttt 600 660 ggcctcctgg accacaagca cctagaccat gaggtggcca agcctgcccg aagaaagagg 720 ctgcccgaga tggcccagcc agttgacccg gctcacaatg tcagccgcct gcaccggctg 780 cccagggatt gccaggagct gttccaggtt ggggagaggc agagtggact atttgaaatc cagoctcagg ggtctccgcc atttttggtg aactgcaaga tgacctcaga tggaggctgg 840 acagtaattc agaggcgcca cgatggctca gtggacttca accggccctg ggaagcctac 900 aaggeggggt ttggggatee eeacggegag ttetggetgg gtetggagaa ggtgeatage 960 1020 atcacggggg accgcaacag ccgcctggcc gtgcagctgc gggactggga tggcaacgcc gagttgctgc agttctccgt gcacctgggt ggcgaggaca cggcctatag cctgcagctc 1080 actgcacccg tggccggcca gctgggcgcc accaccgtcc cacccagcgg cctctccgta 1140 cccttctcca cttgggacca ggatcacgac ctccgcaggg acaagaactg cgccaagagc 1200 ctctctggag gctggtggtt tggcacctgc agccattcca acctcaacgg ccagtacttc 1260 1320 cgctccatcc cacagcagcg gcagaagctt aagaagggaa tcttctggaa gacctggcgg ggccgctact acccgctgca ggccaccacc atgttgatcc agcccatggc agcagaggca 1380 1440 geetectage gteetggetg ggeetggtee caggeecacg aaagaeggtg actettgget ctgcccgagg atgtggccgt tecetoctg ggcaggggct ccaaggaggg gccatetgga aacttgtgga caaggaagaag aacacgact ggagaagcc cetttetgag tycaggggg ctgcatgcgt tycctcctga gatcgaggt gcaggatatg ctcagactet agaggcgtg 1500 1560 1620 accaaggggc atggagettc acteettget ggccagggag ttggggactc agagggacca 1680 cttggggcca gccagactgg cctcaatggc ggactcagtc acattgactg acggggacca 1740 1800 gggettgtgt gggtegagag egeecteatg gtgetggtge tgttgtgtgt aggteecetg 1860 gggacacaag caggcgccaa tggtatctgg gcggagctca cagagttctt ggaataaaag 1913 <210> 475 <211> 1221 <212> DNA <213> Homo sapiens <400> 475 60 atgageggtg ctccgacggc cggggcagcc ctgatgctct gcgccgccac cgccgtgcta ctgagcgctc agggcggacc cgtgcagtcc aagtcgccgc gctttgcgtc ctgggacgag 120 180 atgaatgtcc tggcgcacgg actcctgcag ctcggccagg ggctgcgcga acacgcggag 240 cgcacccgca gtcagctgag cgcgctggag cggcgcctga gcgcgtgcgg gtccgcctgt 300 cagggaaccg aggggtccac cgacctcccg ttagcccctg agagccgggt ggaccctgag gtccttcaca gcctgcagac acaactcaag gctcagaaca gcaggatcca gcaactcttc 360 420 cacaaggtgg cccagcagca gcggcacctg gagaagcagc acctgcgaat tcagcatctg

caaagccagt ttggcctcct ggaccacaag cacctagacc atgaggtggc caagcctgcc

cgaagaaaga ggctgcccga gatggcccag ccagttgacc cggctcacaa tgtcagccgc ctgcaccggc tgcccaggga ttgccaggag ctgttccagg ttggggagag gcagagtgga

480

540

840

900

960

1020

1080

1140

1200 1221

ctatttgaaa tocagootca ggggtotoog coatttttgg tgaactgcaa gatgacotca gatggagget ggacagtaat tcagaggege cacgatgget cagtggactt caaccggece tgggaageet acaaggeggg gtttggggat ceceaeggeg agttetgget gggtetggag aaggtgcata gcatcacggg ggaccgcaac agccgcctgg ccgtgcagct gcgggactgg gatggcaacg ccgagttgct gcagttctcc gtgcacctgg gtggcgagga cacggcctat agcctgcagc tcactgcacc cgtggccggc cagctgggcg ccaccaccgt cccacccage ggeeteteeg taccettete caettgggae caggateaeg aceteegeag ggacaagaae tgcgccaaga gcctctctgg aggctggtgg tttggcacct gcagccattc caacctcaac ggccagtact tccgctccat cccacagcag cggcagaagc ttaagaaggg aatcttctgg aagacctggc ggggccgcta ctacccgctg caggccacca ccatgttgat ccagcccatg gcagcagagg cagcctccta g <210> 476 <211> 175 <212> PRT <213> Homo sapiens <400> 476 Met Ala Gln Trp Thr Ser Thr Gly Pro Gly Lys Pro Thr Arg Arg Gly Leu Gly Ile Pro Thr Ala Ser Ser Gly Trp Val Trp Arg Arg Cys Ile Ala Ser Trp Gly Thr Ala Thr Ala Ala Trp Pro Cys Ser Cys Gly Thr Gly Met Ala Thr Pro Ser Cys Cys Ser Ser Pro Cys Thr Trp Val Ala Arg Thr Arg Pro Ile Ala Cys Ser Ser Leu His Pro Trp Pro Ala Ser Trp Ala Pro Pro Pro Ser His Pro Ala Ala Ser Pro Tyr Pro Ser Pro Leu Gly Thr Arg Ile Thr Thr Ser Ala Gly Thr Arg Thr Ala Pro Arg Ala Ser Leu Glu Ala Gly Gly Leu Ala Pro Ala Ala Ile Pro Thr Phe Asn Gly Pro Val Leu Pro Ala Pro Ser His Ser Ser Gly Arg Ser Leu Arg Arg Glu Ser Ser Gly Arg Pro Ala Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met Ala Ala Glu Ala Ala Ser

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<210> 477
<211> 13
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<212> PRT <213> Homo sapiens

<400> 477 Trp Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly

<210> 478

<211> 19

```
<212> PRT
<213> Homo sapiens
<400> 478
Ser Gly Gly Trp Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly
Gln Tyr Phe
<210> 479
<211> 32
<212> PRT
<213> Homo sapiens
<400> 479
Gly His Asp Leu Pro Gln Asp Ala Trp Leu Arg Trp Val Leu Ala Gly
Ala Leu Cys Ala Gly Gly Trp Ala Val Asn Tyr Leu Pro Phe Phe Leu
<210> 480
<211> 18
<212> PRT
<213> Homo sapiens
<400> 480
Phe Leu Tyr His Tyr Leu Pro Ala Leu Thr Phe Gln Ile Leu Leu Leu 1 1 5 10 15
Pro Val
<210> 481
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 481
Met Ser Pro Leu Pro Trp Pro Gly Pro Leu Pro Gly Gly Arg Gln Gly
His Arg Leu Glu Pro Cys Cys Ser Ser Gly Cys Ala Gly Gly Pro Thr
Trp Pro His Cys Ser Ser Gln Ser Trp Pro Met Xaa Ser Ala Arg His
```

35 40 45

Xaa Gly Leu Gly His Cys Cys Pro Ser Ser Pro

<210> 482

<211> 32

<212> PRT <213> Homo sapiens

<400> 482

Asp Ile Cys Arg Leu Glu Arg Ala Val Cys Arg Asp Glu Pro Ser Ala 1 5 10 15

Leu Ala Arg Ala Leu Thr Trp Arg Gln Ala Arg Ala Gln Ala Gly Ala 20 25 30

<210> 483

<211> 114 <212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<2221> SIT

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 483

Xaa Ala Pro Ala Thr Xaa Ala Trp Asp Thr Val Val Pro Pro Leu Pro
1 5 10 15

Arg Lys Cys Gln Cys Ser Gly Ser Ala Arg Ser His Gly Ala Gly Arg 20 25 30

Ser Ala Leu His Ser Pro Leu Glu Gly Ser Arg Pro Lys Val Pro Ala 35 40 45

Gly Ala Val Gly Lys Ser Leu Pro Gly Gln Ser Arg Pro Gln His Cys 50 60

Leu Pro Pro Lys Gln Pro Lys Gln Cys Arg Pro Gly Leu Glu Leu Lys 65 70 75 70 80

Glu Gly Pro Leu Leu Thr Pro Thr Arg Ala Ser Val Gln Leu Ser His $90 \ \ 95$

Pro Ala Cys Leu Tyr Trp Ala Pro Leu Leu Trp Ile Arg Asp Pro Ala

Ser Val

```
<210> 484
<211> 55
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 484
Xaa Ala Pro Ala Thr Xaa Ala Trp Asp Thr Val Val Pro Pro Leu Pro
Arg Lys Cys Gln Cys Ser Gly Ser Ala Arg Ser His Gly Ala Gly Arg
Ser Ala Leu His Ser Pro Leu Glu Gly Ser Arg Pro Lys Val Pro Ala
Gly Ala Val Gly Lys Ser Leu
<210> 485
<211> 59
<212> PRT
<213> Homo sapiens
<400> 485
Pro Gly Gln Ser Arg Pro Gln His Cys Leu Pro Pro Lys Gln Pro Lys
Gln Cys Arg Pro Gly Leu Glu Leu Lys Glu Gly Pro Leu Leu Thr Pro
Thr Arg Ala Ser Val Gln Leu Ser His Pro Ala Cys Leu Tyr Trp Ala
Pro Leu Leu Trp Ile Arg Asp Pro Ala Ser Val
<210> 486
<211> 133
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 486
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```
Asp Ile Cys Arg Leu Glu Arg Ala Val Cys Arg Asp Glu Pro Ser Ala
Leu Ala Arg Ala Leu Thr Trp Arg Gln Ala Arg Ala Gln Ala Gly Ala
Met Leu Leu Phe Gly Leu Cys Trp Gly Pro Tyr Val Ala Thr Leu Leu
Leu Ser Val Leu Ala Tyr Xaa Gln Arg Pro Pro Leu Xaa Pro Gly Thr
Leu Leu Ser Leu Ser Leu Gly Ser Ala Ser Ala Ala Ala Val Pro
Val Ala Met Gly Leu Gly Asp Gln Arg Tyr Thr Ala Pro Trp Arg Ala
Ala Ala Gln Arg Cys Leu Gln Gly Leu Trp Gly Arg Ala Ser Arg Asp
Ser Pro Gly Pro Ser Ile Ala Tyr His Pro Ser Ser Gln Ser Ser Val
Asp Leu Asp Leu Asn
    130
<210> 487
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Glu Arg Val Gly Met Glu Ser Gly Glu Met Val Cys Gly Leu Gly
Ser Ala Cys Asn Asn Pro Ser Asp Leu Gly Gln Val Pro Val Pro Leu 20 25 30
Trp Xaa Ser Val Ser Pro Pro Val Phe Gly Xaa Gly Trp Asn Gly His
```

```
<210> 488
<211> 107
```

<212> PRT <213> Homo sapiens

<220>

<221> SITE

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<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 488
Met Arg Ser Phe Gln Asp Val Ser Ala Leu Glu Glu Trp Arg Gly Gly
Lys Asp Leu Glu Pro Thr His Ser Leu Leu Leu Leu Leu Pro Leu Arg
Asp Leu Leu Val Val Leu Gly Glu Ile Arg Lys Arg Gln Met Glu Gly
Cys Val Trp Lys Gly Trp Gly Trp Asn Pro Glu Lys Trp Phe Ala Val
Leu Ala Leu Pro Val Thr Thr Arg Val Thr Leu Gly Lys Ser Leu Ser
Leu Ser Gly Xaa Gln Phe Leu His Leu Tyr Leu Glu Arg Val Gly Met
Gly Thr Glu Val Leu Ser Ser Ser Asp Leu Leu
<210> 489
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 489
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Asp Phe Ala Lys Asn His 115

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<210> 490
<211> 61
<212> PRT
<213> Homo sapiens
<400> 490
Met His Pro Ala Gly Pro Thr Phe Met Gly Ser Lys Pro Ile Arg Glu
Gln Gln Phe Gly Pro Asp Ala Cys Leu Leu Leu Cys Val Ala Met
Ala Gly Thr Glu Ala Ser Arg Ala Ala Gln Gln Cys Thr Ser Gln Lys
Val Arg Ala Gly Gln Asp Phe Ser Ala His Ser Asn Pro
<210> 491
<211> 48
<212> PRT
<213> Homo sapiens
<400> 491
Pro Arg Glu Gly Gln Gly Leu Ala Gln Gly His Ser Gly Cys Tyr Arg
Gln Ser Gln Asp Arg Lys Pro Phe Leu Arg Ile Pro Ser Pro Pro Phe
Pro Tyr Thr Thr Leu His Leu Pro Phe Pro Asp Phe Ala Lys Asn His
<210> 492
<211> 22
<212> PRT
<213> Homo sapiens
<400> 492
Asp Pro Arg Val Arg Lys Pro Pro Thr Ala Thr Leu Thr Thr Ala Arg
Thr Arg Pro Thr Thr Asp
             20
<210> 493
<211> 82
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (70)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 493
Ala Ala Leu Glu Ala Ser Val Pro Ala Ile Ala Thr Gln Arg Ser Ser
Arg Gln Ala Ser Gly Pro Asn Cys Cys Ser Leu Met Gly Leu Asp Pro
Met Lys Val Gly Pro Ala Gly Cys Ile Ser Trp Asp Ser Val Glu Ala
Asp Gln Val Ala Gly Ala Ser Gly Gly Arg Ile Glu Val Lys Gly Cys
Gly Met Glu Asn Leu Xaa Arg Leu His Leu Gly Ser Gly Lys Gly Gln
Xaa Xaa
<210> 494
<211> 99
<212> PRT
<213> Homo sapiens
<400> 494
Met Leu His Arg Gln Trp Leu Thr Val Arg Arg Ala Gly Gly Pro Pro
Arg Thr Asp Gln Gln Arg Arg Thr Val Arg Cys Leu Arg Asp Thr Val
Leu Leu Leu His Gly Leu Ser Gln Lys Asp Lys Leu Phe Met Met His
Cys Val Glu Val Leu His Gln Phe Asp Gln Val Met Pro Gly Val Ser
Met Leu Ile Arg Gly Leu Pro Asp Val Thr Asp Cys Glu Glu Ala Ala
65 70 75 80
Leu Asp Asp Leu Cys Ala Ala Glu Thr Asp Val Glu Asp Pro Glu Val
Glu Cys Gly
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<210> 495

<211> 62

<211> 02 <212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 495
Gly Xaa Ala Asn Pro Glu Asp Ser Val Cys Ile Leu Glu Gly Phe Ser
Val Thr Ala Leu Ser Ile Leu Gln His Leu Val Cys His Ser Gly Ala
Val Arg Leu Pro Ile Thr Val Arg Ser Gly Gly Arg Phe Cys Cys Trp
Gly Arg Lys Gln Glu Pro Gly Ser Gln Xaa Ser Asp Gly Asp 50 55 60
<210> 496
<211> 65
<212> PRT
<213> Homo sapiens
<400> 496
Ala Val Gln Gln His Arg Val Pro Gln Thr Ala His Cys Pro Pro
Leu Leu Val Gly Pro Trp Gly Ser Pro Cys Pro Pro His Cys Gln Pro
Leu Ser Val Gln His His Arg Glu Arg Ser Asp His Leu His Ile Thr
Leu Ala Val Gly Ala Ser Asp Trp Gly Gln Gly Ala Leu Ala His Gln
Ala
 65
<210> 497
<211> 220
<212> PRT
<213> Homo sapiens
<400> 497
Pro Lys Thr Leu Pro Val Ile Ser Cys Pro Gly Ser Ser Val Cys Ser
Lys Cys Cys Gln Ser Ala Ser Ala Gln Arg His Pro Cys Leu Ala Cys
Cys Trp Leu Leu Ser Ser Ser Pro Cys Trp Arg Thr Thr Thr Ser Trp
```

His Leu Ser Ser Val Pro Thr Gln Lys Ala Ala Ser Cys Cys Cys

Thr Cys Thr Ser His His Gly Leu Thr Glu Trp Pro Trp Arg His Asn 80 Gly Ser Ser Trp Asn Lys Arg Trp Cys Gly Ser Trp Leu Ser Leu Val 85 Gly Lys Ser Pro Leu Pro Pro Val Thr Gly Ser Asn Cys Gln Cys Asn 110 Cys Asn 110 Cys Asn 125 Thr Val Val Arg Ala Leu Thr Val Met Leu His Arg Gln Trp Leu 125 Thr Val Arg Arg Ala Gly Gly Pro Pro Arg Thr Asp Gln Gln Arg Arg 130 Thr Val Arg Cys Leu Arg Asp Thr Val Leu Leu His Gly Leu Ser 160 Gln Lys Asp Lys Leu Phe Met Met His Cys Val Glu Val Leu His Gln Trp Leu 165 The Asp Gln Val Met Leu His Gly Leu Pro 185 Thr Asp Cys Glu Glu Val Ser Met Leu IIe Arg Gly Leu Pro 185 Cys Val Glu Val Leu His Gly Leu Pro 180 Cys Cys Ala Ala 200 Clu Thr Asp Val Glu Asp Pro Clu Val Glu Cys Cly 220 Clu Thr Asp Val Glu Asp Pro Clu Val Glu Cys Cly 220 Clu Thr Asp Val Glu Asp Pro Clu Val Glu Cys Cly

<210> 498 <211> 223 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <400> 498 Gly Xaa Ala Asn Pro Glu Asp Ser Val Cys Ile Leu Glu Gly Phe Ser Val Thr Ala Leu Ser Ile Leu Gln His Leu Val Cys His Ser Gly Ala Val Arg Leu Pro Ile Thr Val Arg Ser Gly Gly Arg Phe Cys Cys Trp Gly Arg Lys Gln Glu Pro Gly Ser Gln Xaa Ser Asp Gly Asp Met Thr Ser Ala Leu Arg Gly Val Ala Asp Asp Gln Gly Gln His Pro Leu Leu Lys Met Leu Leu His Leu Leu Ala Phe Ser Ser Ala Ala Thr Gly His Leu Gln Ala Ser Val Leu Thr Gln Cys Leu Lys Val Leu Val Lys Leu 100
Ala Glu Asn Thr Ser Cys Asp Phe Leu Pro Arg Phe Gln Cys Val Phe 125
Gln Val Leu Pro Lys Cys Leu Ser Pro Glu Thr Pro Leu Pro Ser Val 135
Leu Leu Ala Val Glu Leu Ser Leu Leu Ala Asp His Asp Gln Leu 165
Ala Pro Gln Leu Cys Ser His Ser Glu Gly Cys Leu Leu Leu Leu Leu 175
Tyr Met Tyr Ile Thr Ser Arg Pro Asp Arg Val Ala Leu Glu Thr Gln 180
Trp Leu Gln Leu Glu Glu Glu Glu Val Val Trp Leu Leu Ala Lys Leu Gly 200
Val Gln Glu Pro Leu Ala Pro Ser His Trp Leu Leu Pro Val 210

<210> 499 <211> 123

<212> PRT <213> Homo sapiens

<210> 500 <211> 63

<212> PRT

<213> Homo sapiens

<400> 500

Gln Ser Pro Leu Pro Pro Val Thr Gly Ser Asn Cys Gln Cys Asn Val 1 5 10 15

Glu Val Val Arg Ala Leu Thr Val Met Leu His Arg Gln Trp Leu Thr Val Arg Arg Ala Gly Gly Pro Pro Arg Thr Asp Gln Gln Arg Arg Thr Val Arg Cys Leu Arg Asp Thr Val Leu Leu Leu His Gly Leu Ser <210> 501 <211> 60 <212> PRT <213> Homo sapiens <400> 501 Gln Lys Asp Lys Leu Phe Met Met His Cys Val Glu Val Leu His Gln Phe Asp Gln Val Met Pro Gly Val Ser Met Leu Ile Arg Gly Leu Pro Asp Val Thr Asp Cys Glu Glu Ala Ala Leu Asp Asp Leu Cys Ala Ala Glu Thr Asp Val Glu Asp Pro Glu Val Glu Cys Gly <210> 502 <211> 50 <212> PRT <213> Homo sapiens <400> 502 Cys Leu Arg Asp Thr Val Leu Leu Leu His Gly Leu Ser Gln Lys Asp Lys Leu Phe Met Met His Cys Val Glu Val Leu His Gln Phe Asp Gln Val Met Pro Gly Val Ser Met Leu Ile Arg Gly Leu Pro Asp Val Thr Asp Cys <210> 503 <211> 102 <212> PRT <213> Homo sapiens <400> 503 Met Ser Gly Gln Leu Asp Ala Arg Pro Ala Ala Ala Leu His Pro Gln Gly Leu Ala His Pro Leu Trp Thr Cys Leu Leu Pro Arg Lys Gly Pro

Ser Glu Val Pro Gln Arg Pro Pro Gln Leu Trp Val Val Ser Ile Ser

```
Val Leu Gln Gly Gln His Arg Gly Arg Ala Gly Pro Arg Asp Glu Gln
Ser Val Asp Val Thr Asn Thr Thr Phe Leu Leu Met Ala Ala Ser Ile
 65
Tyr Leu His Asp Gln Asn Pro Asp Ala Ala Leu Arg Ala Leu His Gln
                                      90
Gly Asp Ser Leu Glu Trp
            100
<210> 504
<211> 20
<212> PRT
<213> Homo sapiens
<400> 504
Ser Val Asp Val Thr Asn Thr Thr Phe Leu Leu Met Ala Ala Ser Ile
Tyr Leu His Asp
<210> 505
<211> 17
<212> PRT
<213> Homo sapiens
<400> 505
Gln Asn Pro Asp Ala Ala Leu Arg Ala Leu His Gln Gly Asp Ser Leu
Glu
<210> 506
<211> 14
<212> PRT
<213> Homo sapiens
<400> 506
Arg Asp Ser Ile Val Ala Glu Leu Asp Arg Glu Met Ser Arg
<210> 507
<211> 39
<212> PRT
<213> Homo sapiens
<400> 507
Met Leu Gly Leu Leu Leu Cys Thr Pro Arg Ala Trp Leu Thr Leu
Ser Gly Pro Val Cys Phe Gln Gly Arg Asp Pro Leu Arg Ser His Arg 20 30
```

```
Gly His Pro Ser Cys Gly Ser
         35
<210> 508
<211> 11
<212> PRT
<213> Homo sapiens
<400> 508
His Gly Phe Pro Glu Phe Trp Tyr Ser Trp Arg
<210> 509
<211> 10
<212> PRT
<213> Homo sapiens
<400> 509
Ala Ser His Trp Leu Gln Gln Asp Gln Pro
<210> 510
<211> 9
<212> PRT
<213> Homo sapiens
<400> 510
Pro Ile Asn His Tyr Arg Asn Ile Phe
<210> 511
<211> 9
<212> PRT
<213> Homo sapiens
<400> 511
Tyr Pro Glu Met Val Met Lys Leu Ile
<210> 512
<211> 14
<212> PRT
<213> Homo sapiens
Pro Glu Phe Trp Tyr Ser Trp Arg Tyr Gln Leu Arg Glu Phe
<210> 513
<211> 9
<212> PRT
<213> Homo sapiens
<400> 513
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```
His Asp Trp Gly Gly Met Ile Ala Trp
<210> 514
<211> 31
<212> PRT
<213> Homo sapiens
<400> 514
Arg Leu Gly Ala Val Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala
Glu Ala Ser Arg Ser Pro Glu Thr Arg Ser Leu Arg Pro Ala Trp
<210> 515
<211> 14
<212> PRT
<213> Homo sapiens
<400> 515
Gly Ser Leu Pro Pro Lys Pro Ile Tyr Leu Val Val Pro Arg
<210> 516
<211> 16
<212> PRT
<213> Homo sapiens
<400> 516
Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys Ser Leu Pro Phe Gly
<210> 517
<211> 10
<212> PRT
<213> Homo sapiens
<400> 517
Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu
 1
<210> 518
<211> 18
<212> PRT
<213> Homo sapiens
<400> 518
Gly Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr
                                       10
Pro His
```

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<210> 519
<211> 16
<212> PRT
<213> Homo sapiens
<400> 519
Asn Ile Ile Phe Ser Asn Gly Asn Leu Asp Pro Trp Ala Gly Gly Gly
<210> 520
<211> 22
<212> PRT
<213> Homo sapiens
<400> 520
Ala Met Met Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro
Ala Asn Pro Val Lys Val
             20
<210> 521
<211> 8
<212> PRT
<213> Homo sapiens
<400> 521
Phe Tyr Thr Gly Asn Glu Gly Asp
<210> 522
<211> 490
<212> PRT
<213> Homo sapiens
<400> 522
Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu
1 5 10 15
Arg Gly Leu Gln Ala Gly Ala Arg Ser Gly Pro Arg Leu Pro Gly Ala
Leu Leu Pro Ala Ala Ser Gly Pro Leu Gln Leu Arg Ala Leu Arg Gln
Gin Asp Leu Pro Ser Ala Leu Pro Gly Val Gly Gin Val Leu Gly Pro
Gly Arg Gly Ala His Leu Leu Leu His Trp Glu Arg Gly Arg Arg Val
 65
Gly Leu Arg Gln Gln Leu Gly Leu Arg Arg Gly Leu Ala Ala Glu Arg
```

Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly His Thr Glu Leu Leu Thr Val Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu Leu Arg Ala Leu Arg Arg Asp Leu Gly Ala Gln Asp Ala Pro Ala Ile Ala Phe Gly Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro His Leu Val Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ser Val Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe Arg Gln 210 215 220 Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg Trp Glu 225 230 235 240 Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr Gln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu His Cys 305 310 315 320 Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys Thr Glu Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp Thr Trp Gly Val Trp Pro Arg Pro Asp Trp Leu Leu Thr Ser Phe Trp Gly Gly Asp Leu Arg Ala Ala Ser Asn Ile Ile Phe Ser Asn Gly Asn Leu Asp Pro Trp Ala Gly Gly Gly Ile Arg Arg Asn Leu Ser Ala Ser Val Ile $420 \ \ \, 425$ Ala Val Thr Ile Gln Gly Gly Ala His His Leu Asp Leu Arg Ala Ser

```
His Pro Glu Asp Pro Ala Ser Val Val Glu Ala Arg Lys Leu Glu Ala
Thr Ile Ile Gly Glu Trp Val Lys Ala Ala Arg Arg Glu Gln Gln Pro
Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu
                485
<210> 523
<211> 22
<212> PRT
<213> Homo sapiens
<400> 523
Cys Ser Val Phe Pro Pro Ser Leu Trp Phe Tyr Leu Pro Leu Val Phe
Asp Asp Gly Asp Val Gln
<210> 524
<211> 122
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 524
Gly Val Ser Leu Pro Leu Leu Gly Asp Ala Ser Gln Leu Gly Tyr Leu
Gly Val Arg Asp Ala Leu Glu Glu Ala Leu Cys Leu Phe Ser Asp Val
Gln Leu Cys Ala Gly Arg Thr Ser Ala Leu Phe Lys Ala Xaa Arg Gln
Gly Arg Leu Ser Leu Gln Arg Ile Leu Leu Pro Phe Val Trp Leu Cys
Pro Ala Pro Gln Arg Trp Ser Leu Gln Arg Gln Ala Gly Leu Leu Glu
Leu Arg Trp Ala Pro Pro Ser Ser Ser Phe Leu Ala Ala Leu Phe Thr
Pro Ser Ser Leu Gly Asn Gly Gly Arg Pro Ser Pro Ser Leu Thr Ala
Xaa Leu Gln Phe Asp Leu Arg Leu Leu Cys
```

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<210> 525
<211> 74
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 525
Val Cys Arg Gly Phe Cys Cys Leu Leu Phe Gly Cys Ala Leu Pro Pro
Arg Gly Gly Val Tyr Arg Gly Arg Gln Ala Ser Leu Asn Cys Gly Gly
Leu His Arg Val Arg Val Ser Trp Pro Leu Cys Leu Pro Pro Gln Ala
Ser Ala Met Val Gly Ala Pro Pro Pro Ala Ser Leu Pro Xaa Cys Ser
Leu Ile Ser Asp Cys Cys Ala Ser Asn Xaa
<210> 526
<211> 34
<212> PRT
<213> Homo sapiens
<400> 526
Met Ser His Lys His Met Arg Arg Ser Ala Thr Ser Tyr Ile Ile Arg
Glu Arg Gln Ile Lys Ile Ile Val Arg Tyr His Tyr Thr Pro Ile Met 20 30
Thr Thr
<210> 527
<211> 16
<212> PRT
<213> Homo sapiens
<400> 527
Ile Arg Glu Arg Gln Ile Lys Ile Ile Val Arg Tyr His Tyr Thr Pro
```

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<211> 13
<212> PRT
<213> Homo sapiens
<400> 528
Lys Lys Thr Cys Thr Met Phe Ile Ala Thr Leu Phe Thr
<210> 529
<211> 13
<212> PRT
<213> Homo sapiens
<400> 529
Glu Lys Ile Phe Ala Lys His Leu Ser Val Lys Gly Leu
<210> 530
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 530
Ser Val Ala Ser Val Phe Ile Pro Leu Lys Val Ser Val Thr Lys Gln
Phe Ile Phe Phe Xaa Phe Phe Phe Phe Leu Arg Arg Ser Leu Ala Pro
Ala Trp Val Ala Glu Arg Xaa Thr Ser Gln Glu Thr Lys Gln Asn Lys
Lys Thr Pro Gln Leu Arg Gly Lys Val Ala His Ala Cys Asp Pro Ile
Thr Leu Gly Gly Arg Arg Trp Glu Val Gly Glu Ser Leu Glu Ala Arg
Ser Pro Ser
<210> 531
<211> 184
<212> PRT
<213> Homo sapiens
<400> 531
Tyr Met Cys Cys Pro Phe Val Leu Asp Lys Asp Gly Val Ser Ala Ala
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<210> 532 <211> 199 <212> PRT <213> Homo sapiens

180

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130
                       135
                                            140
Arg Thr Ser Gly Thr Glu Pro Lys Ile Lys Tyr Tyr Ala Glu Leu Cys
145
                 150
Ala Pro Pro Gly Asn Ser Asp Pro Glu Gln Leu Lys Lys Glu Leu Asn
Glu Leu Val Ser Ala Ile Glu Glu His Phe Phe Gln Pro Gln Lys Tyr
                                 185
            180
Asn Leu Gln Pro Lys Ala Asp
       195
<210> 533
<211> 18
<212> PRT
<213> Homo sapiens
<400> 533
Asp Lys Asp Gly Val Ser Ala Ala Val Ile Ser Ala Glu Leu Ala Ser
Phe Leu
<210> 534
<211> 13
<212> PRT
<213> Homo sapiens
<400> 534
 Arg Asp Leu Thr Thr Gly Tyr Asp Asp Ser Gln Pro Asp
<210> 535
 <211> 15
<212> PRT
 <213> Homo sapiens
 <400> 535
 Lys Ala Val Leu Pro Thr Ser Lys Ser Ser Gln Met Ile Thr Phe
 <210> 536
 <211> 17
 <212> PRT
 <213> Homo sapiens
 <400> 536
 Thr Met Arg Thr Ser Gly Thr Glu Pro Lys Ile Lys Tyr Tyr Ala Glu
 Leu
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<211> 22
<212> PRT
<213> Homo sapiens
<400> 537
Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala
Ala Ser Phe Arg Ala Cys
<210> 538
<211> 22
<212> PRT
<213> Homo sapiens
<400> 538
Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile Asp Ala
Ala Ala Phe Thr Gly Leu
             20
<210> 539
<211> 23
<212> PRT
<213> Homo sapiens
<400> 539
Leu Glu Gln Leu Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp
Pro Ala Thr Phe His Gly Leu
             20
<210> 540
<211> 22
<212> PRT
<213> Homo sapiens
<400> 540
Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu Leu Gly Pro
Gly Leu Phe Arg Gly Leu
20
<210> 541
<211> 22
<212> PRT
<213> Homo sapiens
<400> 541
Leu Gln Tyr Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp
1 5 10 15
Asp Thr Phe Arg Asp Leu
```

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<210> 542
<211> 22
<212> PRT
<213> Homo sapiens
<400> 542
Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser Val Pro Glu
Arg Ala Phe Arg Gly Leu 20
<210> 543
<211> 22
<212> PRT
<213> Homo sapiens
<400> 543
Leu Asp Arg Leu Leu His Gln Asn Arg Val Ala His Val His Pro
His Ala Phe Arg Asp Leu
<210> 544
<211> 22
<212> PRT
<213> Homo sapiens
<400> 544
Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala Leu Pro Thr
Glu Ala Leu Ala Pro Leu
              20
<210> 545
<211> 13
<212> PRT
<213> Homo sapiens
<400> 545
Ala His Cys Ser Ala Ala Arg Gly Leu Arg Ala Thr Arg
<210> 546
<211> 15
<212> PRT
<213> Homo sapiens
<400> 546
Pro Ala His Cys Ser Ala Ala Arg Gly Leu Arg Ala Thr Arg Phe
```

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<210> 547
<211> 23
<212> PRT
<213> Homo sapiens
<400> 547
Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu Val Leu
Trp Thr Val Leu Gly Pro Cys
              20
<210> 548
<211> 21
<212> PRT
<213> Homo sapiens
<400> 548
Leu Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu Val
Leu Trp Thr Val Leu
              20
<210> 549
<211> 24
<212> PRT
<213> Homo sapiens
<400> 549
Leu Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu Val
Leu Trp Thr Val Leu Gly Pro Cys
              20
<210> 550
<211> 14
<212> PRT
<213> Homo sapiens
<400> 550
Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu
                    5
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